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**BULLETIN**  
**OF**  
**THE AMERICAN ASSOCIATION**  
**OF UNIVERSITY PROFESSORS**

**BUILDING FOR PEACE**  
**SCIENCE AND RELIGION**  
**ALUMNI READING AND STUDY**  
**HARVARD ADMISSION REPORT**

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## GENERAL ANNOUNCEMENTS

AMERICAN COUNCIL ON EDUCATION.—The sixth annual meeting was held in Washington, Friday and Saturday, May 4 and 5. Beside the usual routine business the program included reports of the Commission in charge of the Educational Finance Inquiry by Dr. G. D. Strayer, Columbia; on Franco-American Exchange, by Chancellor Capen, Buffalo; on International Educational Relations by Dean Ames, Pennsylvania; on Federal Legislation, President MacCracken, Lafayette; on the Work of the National Education Association, President W. B. Owen; on the University School for Research in Washington, Dr. W. T. Willoughby; on the Work of the National Research Council, Dr. Vernon Kellogg; on Education for Citizenship, President Burton of Michigan; on the Federal Council of Citizenship Training, Dr. Tigert; on Training for National Defence, Brig. General Palmer; on Standards of Physical Fitness, Lt. Col. Johnson; on Occupational Terminology, Lt. Col. Briggs.

The new officers included Chancellor Capen, Buffalo, Chairman, representing the Association of American Colleges; Professor C. J. Tilden, Yale, Secretary, representing the Society for the Promotion of Engineering Education. The Executive Committee includes, in addition to these, Director C. R. Mann; President L. D. Coffman, University of Minnesota; President R. M. Hughes, Miami University; Dr. Edward A. Pace, Catholic University of America; President R. A. Pearson, Iowa State College; Professor H. W. Tyler, Massachusetts Institute of Technology, and Dean F. B. Robinson, College of the City of New York.

The National Conference Committee on Colleges and Secondary Schools has now discontinued its independent existence, becoming a part of the Committee on Standards of the American Council on Education. The Personnel Division of the Council has been actively engaged since October in building up a classified register from sixty-five institutions. The present registration is in excess of five thousand and the Council has made an appropriation of \$7000 for continuance of the work over the coming year with the expectation that it will demonstrate its usefulness in many directions. Up to the present time no special effort has been made to secure its use by executives of institutions in view of the limited number of institutions thus far included.

NATIONAL ASSOCIATION OF STATE UNIVERSITIES.—Volume twenty of the *Transactions and Proceedings*, just issued, includes addresses on Finance and the Control of Attendance, President Suzzallo of the University of Washington;<sup>1</sup> Progressive Adjustment versus Entrance Elimination in a State University, Dean Seashore, Iowa; The Educational Standards of State Universities—the Agencies Determining Them, President M. L. Burton, Michigan;<sup>1</sup> Effectiveness of New Types of Course Examinations, Dr. E. L. Thorndike, Columbia; The New Type of Content Examination, Dr. B. D. Wood, Columbia; Advisory System for Students, Dean T. A. Clark, Illinois; The Place of the Junior College in American Education, Dr. L. V. Koos, Minnesota; State Provision for Junior Colleges, President Barrows, California; The Junior College Movement in Missouri, President J. C. Jones, Missouri.

A GUIDE BOOK FOR AMERICAN STUDENTS IN THE BRITISH ISLES.—The Institute of International Education, 419 West 117th St., New York, has just issued a Guide Book for American Students in the British Isles, containing chapters on a general view of education in the British Isles, on undergraduate study at the various institutions, on graduate study by subjects, on professional study in the different fields, on summer extension work, and on education for women, college life, foreign students, organization, scholarship expense and special problems. Appendices deal with museums, libraries and galleries, societies and institutions, and a table of degrees.

AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE.—President Denney has appointed Professors E. S. Corwin, Princeton; C. G. Fenwick, Bryn Mawr; and W. I. Hull, Swarthmore, to represent this Association at the annual meeting of the Academy.

CAMBRIDGE, DEGREES FOR WOMEN.—At the University of Cambridge the admission of women students of Girton and Newnham Colleges to titular degrees in the university has now been approved. Among the other privileges granted to women students by the new regulations is included the right to be admitted to instruction in the university and to university laboratories and museums, though the

<sup>1</sup> Extracts from this address appear in this issue of the BULLETIN under Recent Educational Discussion.

number receiving such instruction at any one time is limited to five hundred.

**COMMITTEE A.**—Protests against the recent dismissal of Professor Alice Weld Tallant of the Woman's Medical College of Pennsylvania have been received from representatives of the faculty and teaching staff of the college, of the alumnae and of the Smith College alumnae at Philadelphia. The question of an investigation by Committee A is now pending.

The sub-committee appointed to investigate the Fisher case, University of Montana, consists of A. W. Vernon, Carleton College (chairman); F. S. Deibler, Northwestern; Ernst Freund, Chicago; C. R. Lingley, Dartmouth.

## THE LEAGUE OF NATIONS' COMMITTEE ON INTELLECTUAL COOPERATION

### SUB-COMMITTEE ON INTER-UNIVERSITY RELATIONS

#### *Resolutions by the Sub-Committee Concerning Mutual International Assistance for the Study of Modern Languages, Literature and Civilizations.*

The Sub-Committee, after hearing the report of M. Luchaire,

In view of the importance, both as regards the aims pursued by the League of Nations, and, in particular, as regards the bringing about of a better understanding between European and Oriental peoples, and of extending the study of modern languages, without desiring to prejudice the study of ancient languages and civilizations,

Considers that it is desirable to suggest that the Committee shall request the League of Nations to draw the attention of the States Members of the League to the following recommendations:

(1) It would be desirable to ensure that *professors of modern languages* should receive as thorough a preparation and as complete a course of training as their colleagues in other branches of knowledge, that they should enjoy equal advantages, and that they should be given every facility for visiting at regular intervals, for the purpose of study, the countries whose languages they teach.

(2) This training should be organized in such a way that the pupils may be able at the conclusion of their studies to express themselves fluently in the language which they have studied.

(3) Steps should be taken to provide facilities for enabling *foreign pupils* to stay in educational establishments for adolescents; by admitting the pupils in parties; by, if possible, granting reductions in travelling expenses, tuition fees and cost of maintenance; by allowing these pupils to be accompanied by a master from their own country, and by offering this master facilities for staying in the country, by organizing special courses for these parties of pupils, so that they may rapidly reach the level attained by their fellow pupils, and by recognizing the time thus spent in studying abroad as equivalent to an equal period of study in their own country.



(4) It would be desirable to render more universal the employment in educational establishments of all grades, of *foreign lecturers or readers*, whose duty it would be to carry out at least in part the practical side of the teaching of foreign languages; to give these masters—who should be chosen preferably from among young people following a course of advanced study—opportunity at the same time to continue their studies—and to guarantee to nationals who go abroad under those conditions the same advantages as regards pensions and promotion as they would have obtained if they had been serving for the same period in their own country.

(5) It would be desirable to provide facilities for foreign *professors and pupils to travel and stay* abroad in holiday time for the purposes of study, by reducing the cost of travelling, by receiving them in boarding-schools, when these are not occupied by the country's own pupils, and by organizing holiday courses specially for foreign students.

(6) *Inter-correspondence* between students of different nationalities, as explained in the report, should be extended. It should be pointed out in this connection that several countries have already developed this idea to a remarkable degree by setting up a central organization for such correspondence by which letters can be transmitted to the addresses in the most rapid and economical manner possible.

A similar organization on very simple lines is to be recommended for those countries in which no such system exists, and it should be given every encouragement in countries where the experiment has already been made, particularly by means of reductions, if possible, in the postal charges.

(7) It is highly desirable, moreover, that the study of *modern languages, literatures and civilizations* should be developed in *universities*, either by increasing the number of chairs in these subjects, or by grouping this branch of teaching into institutions or colleges for modern studies provided with all the necessary equipment; by founding or encouraging the foundation of foreign study scholarships for university students specializing in modern languages, literatures and civilizations; and by encouraging relations of every kind between persons specializing in these subjects in different countries.

(8) With the same object in view, universities and learned bodies should be encouraged to establish and maintain in the largest possible number of countries *permanent missions composed of scholars, artists, professors and students*, and to give every possible facility for the establishment in their own country of similar missions set up and maintained by foreign states or universities or learned bodies.

The *programme* of these permanent missions should be: 1. To study the contemporaneous life of the country chosen, in all its aspects, and to train specialists who, when they return to their own country, will devote their time to teaching the language, literature, art and history of the country selected. 2. To make known in the foreign country the principal forms of contemporaneous activity in their own country, the principal facts in its history, and the masterpieces of its art and its past. 3. To promote, by all appropriate means, relations between the intellectual centres of both countries.

(9) In order to ensure the continuity of these new methods, and of similar experiments, it would be desirable: to establish a number of *permanent committees*, each of which would investigate the position of the study of the language, literature, history, civilization and general knowledge of one country by another, while a committee in the other country would do the same. Each of these committees would be appointed by agreement between the two Governments concerned, or by learned bodies designated by their Government; it would consist of an equal number of representatives of the two countries; one representative of the Committee of Intellectual Co-operation of the League of Nations might be included in an advisory capacity.

Each of these committees would meet at least once a year, in order to examine all the problems connected with the organization of studies for the acquisition of the knowledge which each of the two countries should possess about the other.

*Resolution of the Sub-Committee Concerning the Exchange  
of Professors*

The Sub-Committee, after hearing the report of M. de Reynold and the communication made by M. de Castro,

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Is of opinion that the exchange of professors between universities of different countries would undoubtedly be of benefit to the progress of science and the aims pursued by the League of Nations.

While not under-estimating the difficulties which this proposal would involve, and the care which must be shown in putting it into practice, by respecting the customs and regulations of each university and the different conditions under which state examinations are held,

Feels that it may in this connection make the following recommendations to be carried out as circumstances permit:

1. In cases in which the period of such exchanges is not limited to a single lecture or series of lectures, it should be extended so as to cover a complete course.

2. Professors in highly specialized branches of study and young teachers should not be excluded from this system of exchanges.

3. Except in special circumstances, the professor sent abroad should possess a sufficient knowledge of the language of the place in which he will have to continue his teaching.

4. Exchanges may be taken to mean, in their strictest interpretation, one university professor going to another university which in its turn would send one of its professors to take the place of the other professor.

Or, in a wider sense, a professor of one country going to give a lecture or a series of lectures in another country, which in turn would send one of its professors to a university in the former country.

These eventualities would necessarily require different methods, for the first would occur mainly in the case of professors of the same science and the same standing, who would thus be more or less interchangeable and could take each other's place for the whole duration of a course. Each country could draw up a list of such professors and communicate it to the other countries.

5. It would appear that the organization of these exchanges must be left, for the present, to agreements between individual countries and individual universities; it would be gratifying to see these agreements multiply and develop; the information furnished by the University Bureau, might be utilized with a view to attaining this object.

6. As regards the financial aspect of the problem, the Committee does not think that the moment has yet arrived for proposing an international scheme. States and universities must themselves estimate the financial sacrifices they may be prepared to make, and regulate the allocation of expenses, if occasion arises, in accordance with special agreements.

We may, even at this early stage lay down the following principles, which are in conformity with the dignity and the disinterestedness of science and advanced education, but which nevertheless do not lose sight of the economic position of professors, which is often precarious;

- (1) That these exchanges must not be made with a view to profit;
- (2) That the professor exchanged should, in one way or another, be freed from expenditure and compensated for any loss which his change of residence may occasion.

It would be highly desirable for a fund to be set up or a university convention to be concluded, the special object of which would be to meet the financial difficulties which are a bar to the extension of the system of exchanges. It might be possible to obtain the establishment of such a fund by private initiative, if the League of Nations is unable to provide for it.

*Resolution Concerning the International Bureau of University  
Information*

The Sub-Committee, after having heard the report of Mr. Banerjea,

Confirms its resolution adopted in Paris regarding the utility of establishing an international bureau of university information.

Considers that such a bureau, established in connection with national bureaus already existing and the governing bodies of the universities, might not only give information to professors, students and persons interested in the university in regard to permanent programmes, temporary courses or experiments being made in the universities of all countries, but might also give information in regard to vacant chairs or university requirements, such information being furnished either by correspondence or by the publication of a periodical bulletin,

And recommends the establishment in the various countries of national bureaux which may enter into relations with the International Bureau.

*Resolution Concerning University Courses on Contemporary History*

The University Sub-Committee proposes that the Committee on Intellectual Cooperation should submit to the Assembly of the League of Nations the following motion:

In order to diminish the sources of misunderstanding and the lack of sympathy between nations the Universities are invited to organize courses on contemporary history according to the facilities at their disposal.

It would be the aim of these courses to familiarize students with the existing political economic and moral conditions in the nations of today.

## BUILDING FOR PEACE<sup>1</sup>

"In the winter or early spring of 1921, Professor Cohen of Utrecht visited his friend Professor Donnan in London, and, as they talked till the wee small hours Professor Donnan suddenly asked, 'Why don't you try to get a group of chemists, from the two sides, together in Utrecht?' From this suggestion came, first, a small group of eight or nine from as many different countries, who met in the home of Professor Cohen in June, 1921, to make their plans, and then a larger gathering, June 21-23, 1922, at which forty chemists from ten different countries were present. . .

"On the afternoon of June 22nd I was asked to reply to words of welcome spoken by Professor Wendt, President of the Royal Academy of Sciences, and by Professor Voerman, President of the Chemical Society of Holland. After speaking of Holland's scientific achievements—five Nobel prizes in science with six million inhabitants as against two in America with one hundred million—and remarking that this is partly due to the fundamental law of the State which says that the universities are founded to train men for the service of the State and in the methods of research, I said: 'It is in the minds of us all that for the first time scientific men are gathered here who come from countries on opposite sides in the war. My last day in America was in Quebec and there, on the front of their Parliament House, I saw the statues of Wolfe and Montcalm, the two great generals who fell fighting each other on the Plains of Abraham. There, in that house, meet the representatives of a people one-half of whom still speak French and the other half English. That is, to me, an omen of what must happen in Europe, if Europe is not to destroy herself . . .'

"So far as I could learn, the sentiment met with approval from all present. Later, in Germany, I spoke to many different chemists of this address. Only one of these failed to listen to the account with sympathy. All others seemed to desire a permanent peace, if that is possible. Very many feel that some features of the treaty of Versailles are unjust and must be changed, and many think that France is intent on destroying Germany or on taking additional territory from her. Many despair of any change in that policy, but I think all desire a peaceful solution of their difficulties.

<sup>1</sup> Copies of the complete pamphlet *Building for Peace* may be obtained from the Chemical Catalogue Company, New York.



"The attitude of the single individual just mentioned was very different. To him the only possible solution is that of another war in which Germany is to recover the lost territory and destroy France. . . His whole habit of mind was military. It is evident that one of the greatest obstacles to overcome in building for peace is the class of men who make a profession of war. . .

"In every country I talked freely and very frankly with chemists, about political and economic as well as about scientific questions. In the present crisis of the world's history, it is clearly the duty of every one to try to understand men of good will in other countries and especially in those countries with which we were recently at war, and to try to find a common basis upon which we can work together to bring better conditions. As I have often remarked this summer, we must disabuse ourselves of the opinion that political, or indeed, other actions are ever entirely white or entirely black—they are always gray and, while we are prone to think that our gray is almost white and the gray of a former enemy is almost black, we should be ready to admit that the shades sometimes approach each other or may even be reversed from our first, one-sided opinion. If only two men can enter into a conversation with open minds and an earnest desire to know the truth they can almost always make some approach toward a common ground. . .

"At the close of the summer and after this paper had been mostly written, I felt very strongly that I had had a very much better opportunity to get the German point of view than to get that of Frenchmen . . . To remedy this defect, I wrote to my friends, Professor Charles Moureu and Dr. Charles Marie, asking a number of questions. Each has very kindly written me at some length . . .

"Professor Moureu says that although Alsace and Lorraine were taken from France in 1870, she has never started a war to recover them because she knew that the suffering which would be caused was far too great a price to pay. He thinks that Germany saw in France the greatest obstacle to her plans for world dominion and that she started the war of 1914 to reduce her to a subordinate and helpless position. He speaks of the violation of the neutrality of Belgium and of the atrocities committed there and in Northern France and says that the scientific men of Germany made no protest but that, instead,

ninety-three of the leaders signed the Manifesto justifying the conduct of the German armies. . .

"He considers that Germany is not carrying out the terms of the treaty of Versailles in good faith. Stocks of concealed arms have been found, and he claims that in her police she has the skeleton of a large army. This makes it necessary to maintain a large French army. In spite of this, the period of military service has been reduced to 18 months and they hope to reduce it to one year. If Germany would disarm in good faith and would restore the devastated regions, France would be only too glad to disarm also and have a genuine peace. At present the scientific men of Germany favor a return to an imperialistic form of government, which is, to Professor Moureu, synonymous with Prussian militarism. So long as this is the case and so long as they do not show, in some way, that they will not support a war for the recovery of Alsace and Lorraine, or for the destruction of France, the mutual confidence necessary for friendly relations cannot exist. . .

"Dr. Marie considers that the claim made by some Germans that the war was a preventive war is ridiculous. Russia was disorganized by Czarism, England had almost no army, and France, with her much smaller population, could not be a menace to a country with the powerful military machine which Germany had. The spirit of revenge in France, of which one hears so much, was very superficial. The peasants live from day to day, thinking only of how they may live by their work; the laborers are profoundly pacific and were constantly accused of anti-militarism; the intellectual classes, teachers and professors, were fundamentally pacific. He speaks of the part taken for justice against the reactionaries at the time of the Dreyfus affair and asks whether the universities in Germany have ever fought against militarism. . .

"Dr. Marie agrees with me that we must do everything we can to avoid the return of the horrors we have seen. For that it is necessary to unite men of good-will in all countries; it is necessary to unite those who have a human ideal. It is necessary further to form public opinion, to instruct the people and show them that they have been deceived. We should support idealism; we should finance peace as others finance war and *by the same means*. . .

"Three days were spent with Professor Jean Piccard and his wife at Lausanne, Switzerland. Professor Piccard was a member of the



staff in the University of Chicago for three years and his wife is the daughter of Dr. Ridlon, a well-known surgeon of that city. Professor Piccard considers that American professors have much higher ideals than those in Europe. He meant, especially, their ideals of responsibility for the moral character of their students. Against this may be set the very high standards for scientific work which are the *sine qua non* for a professorship in any European university. . .

"In Zürich the most significant political conversation was with Professor Treadwell, who has succeeded his father, an American, in the chair of Analytical Chemistry at the Polytechnic. He had recently returned from a trip to Berlin. He reported that after the war it was the general feeling that the recovery of Germany depends on steady, hard work, and that for some time all classes accepted this principle. Of late, however, workmen find that they are robbed of their savings by the falling value of their money. The growing feeling that it is impossible to meet the demands of the Entente for reparations is driving them to despair and they are ceasing to work. There is doubtless some truth in this, but in Germany I heard no reports that many workmen are idle. Some did report that workmen are spending all they earn because it is useless to save. Professor Treadwell also reported that if Germany becomes bankrupt many Swiss houses must fail because of the large amount of German paper held there. . .

"In Freiburg, I visited Professor Wieland and was received in the most friendly manner as a guest at his table. Before entering Germany, I had been very doubtful as to how freely political and economic questions could be discussed. I found it possible everywhere to talk very frankly and with perfect sincerity, I am sure, on both sides, about topics of the most delicate international character. With one exception, there was an evident desire to know and to tell the truth as each of us understood it.

"Professor Wieland said that at the close of the war it was the general feeling that Germany should accept the result and work hard to pay a reasonable amount for reparations, but that the sums demanded now seem so unreasonable and impossible that a very bitter feeling is growing. This bodes no good for France in the future, if something is not done to remedy the matter. . .

"Professor Willstätter sent me in the fall of 1914 a copy of the

famous Manifesto of ninety-three German professors, justifying Germany's course in the war. In preparing for the meeting in Utrecht there was an understanding that the chemists who signed the Manifesto and some others who might be particularly obnoxious to the allies would not be invited. In a similar manner some of the chemists from the allies were not invited because they might be obnoxious to the Germans. Professor Willstätter said that this exclusion of some of the greatest chemists in Germany had made an unfavorable impression in some quarters. He seemed to speak of it in sadness rather than in anger—would evidently like to resume friendly relations but was quite ready to forget himself and would not put the slightest stumbling-block in the way of the re-establishment of such relations for other chemists.

"It is to be feared that, even today, some Frenchmen think more of the glory of recovering the lost provinces than of the fearful price which has been paid by France, to say nothing of the rest of the world. And there are, undoubtedly, many in Germany, today, who look at this problem from the same old point of view. Such men, on both sides, are sowing the seeds for a war which would completely destroy the civilization of Europe.

"Professor Willstätter contrasted the publication of bitter attacks on Germany in the *Comptes Rendus* during the fall of 1914 with the absence of similar attacks in German scientific publications. He also contrasted the erasure of the names of German chemists from the honor rolls of the Chemical Society (London) and the American Chemical Society with the decision of the German Chemical Society that it would not erase the names of English chemists. Possibly he does not sufficiently realize the difference between countries invaded and laid waste by an enemy and a country which remained almost intact throughout the war. If the valley of the Rhine had been treated as Belgium and Northeastern France were treated, German scientific men might not have retained their equilibrium so well. . .

"Many Germans are ready to admit in private conversation, or correspondence, that some of the statements in the Manifesto are not true and that it was signed in a fervor of patriotism and at a time of great popular excitement which prevented any careful consideration of its content of facts or methods of expression. To go further and

sign officially a statement of repudiation would seem a humiliation to which they could hardly submit. It certainly is not magnanimous to ask for such a statement from a defeated enemy. . .

"The fall in value of the paper mark has been very hard on every one living on a salary or on a fixed income derived from investments. Many professors can afford meat only once or twice a week and find it impossible to buy needed clothes and books. Many people who were well-to-do and lived in luxury under the *old régime* are now actually starving, or dependent on charity. It is not strange that such people think the republican government is partly at fault for these conditions and that a monarchical government would bring a quicker return to livable conditions. There is undoubtedly, too, a genuine distrust of a really democratic government with the power in the hands of the common people. The corollary which many Americans draw, that the university men are militaristic and plan to prepare for a war for the recovery of Alsace and Lorraine, is not necessarily true. . .

"During the war the German government did not levy heavy taxes to pay part of the expense. America and England seem to have been the only countries which had the foresight and courage to do that, and they are the only countries involved in the War whose finances are sound today. At first Germany expected to levy an indemnity which would repay a large part of her expenses. Later the government did not dare to confess to her people that it had given up this hope. This failure to levy adequate taxes during the war compelled the new Republic to start with a very heavy war debt and the bill for reparations on top of that has given an almost intolerable burden. . .

"In Vienna, Professor Klemenc, with whom I spent the day, told me that his salary was worth about ten dollars a month in gold. He took me for lunch to the table furnished the professors of the University by Americans—as he said, to a 'frugal meal'—a nutritious soup, pressed corned beef and rice and two slightly sweetened cakes with a little jam in the center. At the table I met a Catholic Professor of Theology and also Professor Molisch, Dean of the Philosophical Faculty. The latter is going to Japan for two years, largely, he said, to get into touch once more with the outside world. . .

"Every one with whom I talked in Austria seemed to think that the only hope for the people is a union with Germany. When Germany gets on her feet again, as she certainly will, the union with Germany

would stabilize the currency, but one cannot help thinking that the difficulties are in part, much more deep-seated. There are at least two other obstacles to recovery. The official life of a large empire has been, in considerable measure, retained since the country has been cut down to a small fraction of its original size. A very pressing problem is to find productive occupations for men who ought to be dismissed from the service of the state. If dismissed without furnishing some other remunerative work, they would starve. . .

"A second difficulty is that Austria cannot raise the food necessary for the population and has not, within her borders, the raw materials needed for her factories. Here, what is needed is a customs-union with neighboring states which would permit a free exchange of manufactured products for food and raw materials. Some one has complained that the treaty of Versailles has Balkanized all Europe. That would not be so bad if the boundaries were genuinely national and natural instead of being largely related to military strategy, and if there could be the general disarmament which the treaty promised. If the treaty could be revised in these directions, we might then hope, at a not too distant future, for a federation of Europe which would permit free intercourse for travel and for commerce. . .

"But the present attitude of Germany and of France and the way they are building for the future are of much greater consequence than the detailed history of what is past. If Europe could only forget most of her political history and realize that the men on the two sides of an artificial or natural political boundary are more alike than different, if they could only know each other—there might be some hope of permanent peace. It is for this reason that it is so important that scientific men and others should re-establish friendly relations and replace separation and mutual suspicion with personal acquaintance and cooperation. . .

"At the meeting of the International Research Council at Brussels, Sweden introduced a motion 'that the Statutes of the International Research Council be altered as soon as possible, so as to permit the admission of all nations to the Council and its Unions. With the exception of Frenchmen and Belgians, it is my impression that a large majority of the delegates were in favor of this motion. If a vote could have been taken on its merits and without regard to the wishes of the French and Belgian delegates, it is very likely that the motion



would have passed. At the time of the meeting the discussions between Germany, France and England about the reparations were in a critical situation and the feeling of Frenchmen and Belgians was evidently so intense, in opposition to the motion, that no one thought it wise to precipitate the violent discussion which must have followed any attempt to secure favorable action. Even the delegate from Sweden recognized the situation and presented the motion rather as a task which had been given him to perform than as a motion which he thought it wise to press for action. The motion was, accordingly, laid upon the table. . .

"About the responsibility for the war, I have already expressed myself. We certainly can never expect Germany to admit that the whole guilt for starting the war rests on her shoulders. No one who has studied the question with an unbiased mind can believe that. Isolation and non-intercourse breed misunderstanding and suspicion. There is very much more to be gained by the renewal of acquaintance between men of good-will in France, Belgium, Germany and Austria than by assuming a 'holier-than-thou' attitude. In the present crisis of world affairs it is an imperative necessity that the scholars and scientific men of all nations should rise above the limitations of narrow and short-sighted patriotism and endeavor to acquire a knowledge of the truth about fundamental economic and political questions. Nothing is so discouraging as the general pessimism in Europe about the possibility of finding any way out of the morass into which she has fallen. It is difficult for the best of the Germans to believe that there are more than a very few good men in France and it is equally difficult for Frenchmen to think that there are good Germans. The French common soldiers and the Germans of the laboring class, whose starving children they fed after the armistice, are learning the lesson of international good-will and of belief in the goodness of other people than their own, better than the men who stand highest and should see most clearly.

"Apart from the desperate need for the renewal of acquaintance between men in different countries who have a sincere desire to find the way to better world-conditions, there is great need that men should once more unite their forces and work together for the advancement of knowledge. Genuine science knows no national boundaries, and every scientific man must build upon the work of the past and re-

late his work to that of his contemporaries. While this is done largely through scientific journals, personal contact with other men in scientific meetings is also helpful. There are many questions of terminology, of indexing and publication, of working together in compilation and systematization of our vast stores of data in the various sciences, which call for cooperation between all scientific men in the world."

W. A. NOYES.



## RECENT EDUCATIONAL DISCUSSION

FINANCE AND THE CONTROL OF ATTENDANCE.—At the present hour the control of the size of our student bodies offers our quickest and most manageable method of relief. We are prompted to take some action here wholly regardless of the problem of finance and on purely educational grounds. As experienced and careful observers, many of us believe that the over-saturation of our institutions with masses of students mediocre in ability and lacking in intellectual interests is making it more and more difficult to maintain that community zeal for intellectual attainment which is needed to inspire and sustain university study. At times it seems as though the *esprit* of the student body gives better support to sociability and recreation than to hard intellectual work and personal development along cultural lines. We know that the presence of the half-hearted and the half-gifted in the class room is slowing up our intellectual accomplishments. We do get rid of some of these, but not soon enough to remain undamaged by their presence. In our effort to give every kind of an individual every conceivable sort of a chance, we are not giving our institutions as such a real chance to be fully what they were intended to be, real universities. To my mind the problem of attendance control is the most important one before us, considering the present state of the public mind toward the financing of higher education. . .

"Some conscious policy of selecting and rejecting students, which is thoroughly thought out, must be adopted by state universities. The endowed or semi-public institutions have already embarked on such a policy. We have lagged behind because the task is infinitely more difficult for us. At any rate we cannot continue to drift, meeting emergencies with expedients, the accumulation of which fixes policy for us without our having a clear sense of where we are going. One has only to examine the practices of the larger state universities to perceive that the failure to limit attendance to those fit to take advantage of college and university training is seriously interfering with the American principle of equality of educational opportunity. The larger universities are slowly ceasing to be free schools. Beginning with small fees they are constantly adding more fees because legislatures do not give them enough money. It is the large size of their

budgets rather than their per capita costs (usually low) which influences fund-voting bodies. The result is an economic discrimination against the intellectually able of the least fortunate economic groups; such a tendency should be fought by every one of us. It is an undemocratic and an unwise public policy. We need to pick our brain power and character from the widest human pile, not merely in fairness to the individual but in fairness to the Nation which asks us to supply the best leaders available within the whole population.

"Those middle and small sized institutions which suffer from lack of money have recourse to the fee system less often, for the impulse to impose it on them is not strong in legislatures. Their danger is of a different sort. They overcrowd their classes, under-pay their instructors, and under-equip laboratories and libraries in order to give instruction to everybody who wishes to come. The result is that they merely give equality of opportunity for a second or third rate higher education instead of an equal opportunity for the best education we know how to give for a civilized life and public service. Since the war the larger universities have combined this transgression with that of economic discrimination.

"Let us not weaken in our resolution to deal with this aggravating problem as the first post-war pressures of attendance are beginning to relax. We shall have only temporary relief. Prosperity and depression are still rhythmic economic phenomena which offer no permanent settlement of a chronic trouble which vacillates between bad and worse. One has only to glance at the tables of high school attendance and college entrance, grouped in ten-year periods, to realize the persisting nature of the American aspiration for higher education. We shall find little to justify us in believing that we shall reach a stable attendance in any future which may be accurately foreseen by us. Without conscious control upon our part, one which is both wise and fair, our attendance will enlarge irregularly but certainly. . . "

"After being fully persuasive with legislatures and quite economical in the management of the institutions in our care, we shall have in some way to limit the attendance to that number of the best fitted which our physical facilities and maintenance funds permit. From this I can see no escape. Temporarily we may bear with the public, sharing its temporary financial inability, by overcrowding our classes

and underpaying our instructors, but such a transient program is based on the hope of early relief, one which persists too often with hope deferred.

"The limiting of attendance cannot be arbitrary in a State university. For the time being 'first come, first served' may be the rule where laboratory or other facilities are quite inadequate. Requirements may be delayed to help the unfortunate who are late in filing for place. If the probability of more space and equipment is scant in the immediate future, such congestion must be prevented by higher and better standards for admission to and continuance in college. . .

"The establishment of public junior colleges supported by public taxes is likely to increase rather than diminish the number of college students educated at public expense, though lower division students at the university may be lessened. Many junior colleges widely distributed at population centers will increase interest in as it increases opportunity for college attendance. Just what effect these many small claims on the public purse will have on the support of the university proper at the center it is too early to say. The experiment is still new.

"The readiest method of living within available finances is to limit our attendance by some flexible and fair method of picking and rejecting, keeping and eliminating students. Our selective methods should not be confined solely to the group of high school graduates who line up at our doors. Our policy should be more comprehensive and positive. It is as true to say that many of those who ought to come to college, do not, as it is to say that many who do, ought not. We ought to commit ourselves to the finding of all the able, as we certainly ought to commit ourselves to the dismissal of those who cannot or will not do the work. . .

"Just as our policy of admitting students must be broadened so as to find all the talented, our policy of continuing students in the university or college course must be broadened so as to salvage the failures of high native ability. At the present time we are largely satisfied to eliminate more or less mechanically those who do not make the grade required. We do temper the harshness of our crude dropping system by warnings, counsel and rehearings. But our attitudes should have greater functional breadth at the beginning. Save in

certain special cases that require shock treatment, it is better to save the talented, than to drop and later restore them.

"It is probably true that we have more justification for limiting numbers in the professional schools than in the liberal schools. The State cannot have too many well educated citizens; but it can have an over-production of lawyers, doctors, engineers and other professional specialists. Entrance to a professional course may well be determined by two factors, ability and social demand for special services, while entrance to the liberal arts colleges should be determined solely by personal ability. . .

"In practice there is a tendency to make the fees in professional courses higher than those in the liberal arts. The philosophy of this economic discrimination is not always clear. Certainly it would seem that a poor boy especially gifted to be a surgeon ought to have an opportunity for training and service equal to that of a similarly able boy with means. . . The argument is constantly put forth that professional courses should have high fees because they lead to money-making activities as the liberal courses are not supposed to do. The validity of this distinction is under serious question. . .

"The dangers of attendance control unwisely managed are clear. We must admit them at the outset. But we can do so much better than we are now doing that I think it is our immediate responsibility to proceed to some wholesome plan. We are not going to give up our even rank with the endowed universities. They are proceeding with attendance control; and we must. We must for another reason. The public will judge our product and the public will pay our bills only if it likes our work, judged by the service of our product. We do not need to speak in detail of the money we may be wasting on the unfit when it ought to be spent on those who can profit most by the training and deliver the largest service after training. We need only hint at the social waste and the social danger of graduating the semi-equipped with the confidence that they are masterful persons entitled to carry responsibilities they cannot finally shoulder well. Let us not cripple our great institutions by the loss of spiritual and financial support which is bound to ensue if the public once loses faith in the university product."

PRESIDENT HENRY SUZZALLO, in the *Transactions and Proceedings of the National Association of State Universities*.



THE EDUCATIONAL STANDARDS OF STATE UNIVERSITIES; THE AGENCIES DETERMINING THEM.—“As we proceed to this task, let us think first of the conditions which are peculiar to State universities. I shall mention several.

“1. When an institution is tax-supported it inevitably enjoys both the benefits and the dangers of popular interest. So far as its own local constituency is concerned it has free and unlimited publicity. As a rule this condition is wholesome. Its significance for our present discussion, however, is plain. The taxpayers send their own children, and rightly so, to the university. This process inevitably exercises a highly selective influence upon prospective students. Moreover, it makes the opportunities of higher education splendidly available for all groups in the social scale. Fortunately, the forces of the universe are on our side. All of the genius and mental capacity of the race is confined to no particular group nor limited solely by the economic resources of families or commonwealths. The fact, however, that the universities represented here are tax-supported does have real bearing upon that factor of our subject which relates to native endowments.

“2. Again, these State institutions enjoy an unusual relationship to the public high schools. In fact, both are integral parts of one educational system. Perhaps we find in this relationship the most potent single factor in our entrance situation. Harmony should and must prevail between the high schools and the State university. To a certain extent, therefore, we find here an agency which is involved in the determination of our educational standards.

“3. The possibility of political interference is a factor which cannot be overlooked and which stands out more prominently in the minds of those associated with other types of institutions than it does in our own. It must be admitted, however, that while the history of State universities is reassuring, there have been enough instances of actual interference to occasion some concern. Undoubtedly we are dealing with an aspect of the State university which is frequently cited as the outstanding weakness of the system.

“Perhaps it must be acknowledged on both sides that today this fear is less justified than ever before. It takes the form of influence and inference rather than direct interference with the actual conduct of the universities. No one apparently questions objectively the

independence of the State university. In fact, some of the tax-supported universities have their integrity and autonomy guaranteed to them by the constitution of the State. The real problem usually arises in a purely practical way. It becomes a question of common sense, good judgment, and practical wisdom not to do or insist upon certain things lest they jeopardize larger interests. There is no actual interference with constituted rights, but there is a tendency to expect in some quarters that decisions will be personal rather than objective. A similar question, however, may be raised regarding the privately endowed university. Must it not have some regard to the wishes or idiosyncracies of its constituents although they never venture directly to control or even suggest policies?

"The challenging phase of this aspect of our subject must not be overlooked. Democracy has attempted through its own agencies, to organize and conduct institutions of higher learning. It represents, relatively speaking, a new vision of mankind. The last century has produced some evidence concerning the experiment which is highly gratifying. While we may at times be forced to concede that the possibility of political interference has affected the educational standards of State universities, it must in fairness be said that the financial support afforded by the States has no parallel in the history of education, and, above all, with increasing rarity has there been any tendency to interfere with issues fundamental to true universities, such as appointment of professors and freedom to teach the truth even in fields around which bitter controversies may be raging.

"4. We come now to the question of size. The growth of the tax-supported university in the last three decades has been astounding. The situation growing out of the war has emphasized it in recent years. Just now there are indications of a return to a more normal rate of growth. The relation between this question of growth and size on the one hand and our educational standards on the other has some interesting aspects.

"We are coming to see that quality and quantity are not mutually exclusive possibilities in higher education any more than they are in naval or military establishments. The British navy has maintained high standards because of its largeness. At any rate it may be affirmed with some show of reasonableness that excellence does not inhere in size per se. Many small institutions are doing excellent



work. Many others are seriously handicapped by inadequate resources and are doing very mediocre work. It is true that during periods of rapid growth the State universities have found it difficult to avoid neglecting the individual student. That situation has been, or is being, rapidly corrected and we find ourselves face to face with the possibility of the highest educational standards just because of our size. It ensures wide educational experimentation, particularly in the direction of meeting the needs of differing groups of students within a given course.

"5. As a final condition peculiar to the State university we must allude to the sound and permanently established principle of the separation of Church and State. Some have assumed that this principle must inevitably result in 'godless' institutions. That this assumption has entered into the judgments of many discriminating parents when choosing a college or university for their children no one can successfully question. Undoubtedly character is primary in life. No form of institution can serve well in a democracy which fails to reckon with the issues of life and to develop sound dependable character. But does the principle of separation of Church and State mean this? Our forefathers had no intention of creating a godless or irreligious or even non-religious public school system. Religion of a very vital type prevails in State universities. The representatives of organized religion are close at hand. The breadth of view, the cosmopolitan spirit, the grip of real work to be done, the appeal of world wide interest are there. Narrowness and bigotry, excessive individualism and morbid self-introspection are swept away in the main currents of a life whose interests are as broad as mankind. . .

"The primary fact about a university is not the origin of its financial support. Whether universities are organized by groups of individuals known as corporations or by peoples known as States, they endeavor to perform certain high functions. Privately endowed and tax-supported universities have much more in common than is sometimes recognized. Their differences are insignificant compared with their likenesses. All American universities today face conditions which bear very importantly upon their educational standards. . .

"The bearings of the things of the mind, the power of ideas, upon citizenship, particularly under our form of government, the fact that 'human progress is largely mental progress,' that the developments

of the last three centuries have been due mainly to the effectiveness of a few minds, and that capacity for thought is a *sine qua non* for the meeting of the issues now before mankind rarely penetrates the imagination of the people as a whole. Similarly, we might speak of America's attitude to art, amusement or leisure, arriving at equally disconcerting conclusions. . . . We cannot exist apart from our background. We would not if we could. We have solemn obligations to our respective States. When, in American hotels and shops, the youth of our day actually discovers that the unquestioned ideal of America deals with intellectual values, then our tasks will be easier. When political life and the press reflect unqualified appreciation of scholarship, art, and letters we will find less need for discussion of educational standards. When our youth grow up unconsciously believing, because of the spirit of our nation, that to be a university professor, an artist, or a poet is among the highest honors of life, then our educational standards will have potency. . . .

"By the use of the term 'high-brow' our students doubtless accomplish more than they intend. They are quite right in disparaging the 'grind' or the 'commercialist,' but they have set in operation forces which cut straight across the main business and purposes of a university. Real distinction goes to the one who achieves success in student activities. Our real problem is not to limit campus recognition to scholarship, but to extend the dignity now accorded to the athlete and similar personages to the man or woman who demonstrates his capacity for the real business of a university. The social status of the student who achieves intellectual distinction is not assured. Without correction just at this point there is little hope for truer educational standards.

"American universities have made the serious mistake, until recently at least, of failing to provide for the individual differences of students. It is just at this point that the larger schools may come into their own. With large classes it becomes a simple matter to group students according to their capacities. The moment this method is followed larger results are possible. Some students are never interested or thoroughly aroused until all their energies are called into action. When a student discovers himself placed in a group doing five times as much work as another group in the same course and apparently working no harder, he gets a new angle of

vision on work. He is headed straight toward a new appreciation of his abilities and responsibilities. He is in the making as a citizen. His interest is quickened because he sees stretching ahead new and wider areas of accomplishment. He is led speedily into new regions of knowledge—that is, *new to him*. Best of all, he sees that college is not merely a continuation of high school. He is on the way to acquiring a new understanding of his universe and a new sense of his own capacities. . .

"Only as we correct the evils born of the elective principle shall we be able to elevate our educational standards. Our aim must not be limited to mechanical devices for organizing curricula or conducting examinations, important as they are. We must have teachers who daily are conscious of the fact that education is an active spiritual affair which actually affects a student's inner life. It must make him a different being, improving his taste for truth, deepening his appreciation of beauty, enhancing his love of the good. When this is done, when knowledge is seen as a unity, students will study and think and write. They will find as much joy in honest discussion and debate in which they establish their judgments of the world and life as they do now in more primitive activities."

PRESIDENT M. L. BURTON, in the *Transactions and Proceedings of the National Association of State Universities*.

COLLEGE OBJECTIVES AND IDEALS.—"The question of liberty and direction has long been a disputed one in education as it has in other interests in life. The pendulum has swung to both extremes and is at present dangling somewhere near the middle. We long had the fixed courses and the disciplinary theory. Later we had free electives and education by individual self-expression. At present the tendency is to walk in the middle of the road. It is interesting to note how often in life Aristotle's doctrine of the mean becomes the court of last resort. That there is value in the principle of liberty, that it has provided for individual interests and aptitudes, that it has greatly enriched the curriculum and that it has led many students to seriously consider what studies will prepare them for the work they intend to do in life, is beyond question; but it is also a fact that it has led many in their culture to spread themselves thin over the curriculum. A smattering acquaintance with many subjects is by no means con-

ductive to learning or mental power. It scarcely illumines one's general ignorance. . .

"Probably there is no more important problem confronting the American college than that of giving proper guidance to students in the selection of their courses, and stopping the hit and miss method by which many are losing much of the benefit the college might give. Of course, the colleges have done something to remedy the waste. They have instituted prerequisites and group requirements, majors and minors, and they have introduced the advisor system; but none of these things has eliminated the evils referred to. In all our colleges, students are still choosing their work on the basis of fancied likes and dislikes, on student reports about professors, on the advice of upper-class men, or by reason of some incidental factor or trivial circumstances and with little appreciation of their aptitudes, needs, or the relation of studies to their future calling. There are two remedies which we believe would help relieve the present practice of miscellaneous browsing, or trying to suck the nectar from too many flowers. The first is the working out of a better scheme of the correlation of subjects. There are relations between subjects such that they vitally support each other and strengthen a man's grasp of them when he pursues them in proper order, and there are correlations of subjects to a man's future studies in graduate and professional schools. . .

"I believe much would be gained if the subjects taught in college were presented to the student more in the form of his experience with reality. Textbooks and lectures are too often largely filled with generalizations adapted to mature minds of large information and developed powers of reflection. They are organized forms of knowledge for the convenience of logical minds. But in the world of experience reality does not present itself in any such manner. It is not a thing of definite facts and laws and formulas but of fused phenomena quite different from what is given us in books. There needs to be a better mediation between the logical presentation of the facts as usually given in college and the experience of immature minds as they have seen them in the real world. The approach must be more from the concrete than from the abstract standpoint. Teaching would thus become more real, more vital, and the interest of students in their work would be correspondingly developed. . .



"Socrates got men to try for the meaning and value of things, and for some generations the students of Greece caught his spirit and largely followed his method. This should be the effort of the college today if it would instill into youthful minds an enthusiasm for truth. Instead of being absorbed with subjects, with the idea that much knowledge is much culture, it should give its students correct methods of intellectual procedure, true modes of thought, a right philosophy of life, a habit of insight, appreciation and contemplation. It should give the student a disciplined mind rather than large chunks of knowledge; an ability to solve problems rather than a body of facts; a knowledge of how to attain wisdom rather than large quantities of it. Of knowledge it is written, it will vanish away, enter the land of haze, but of right mental habits formed, it may be said, they will abide forever. A student who in college has been taught to analyze facts, to form judgments, to perceive relations, to estimate values, to open his mind to the significance of intellectual and emotional phenomena, cannot but have developed an enthusiasm for learning.

"I cannot close this discussion without taking a crack at our mechanical college methods, one of the most responsible factors in destroying the spirit of scholarship. We have placed too much dependence on external pressure and too little on stimulation and inducement; too much on regulation and too little on awakening interest and fascinating the mind with the importance and beauty of truth. Our method of instruction is mechanical, so many pages of the text, so many hours of collateral, so many hours of recitation per week. We have made the great end of college work, not gaining the ability to think, but the attaining of credits. The emphasis is not on correct methods of intellectual work, but on securing the 120 credits and 120 points necessary for graduation. And to see that these credits are properly obtained, we have our daily marks, our tests and quizzes, our outlines and our finals. There is probably no greater cause of the student's losing the point as to why he is in college than this everlasting hammering on the matter of credits. This is what the student has his eye on, not the content of learning, not the enriching quality of culture, not the joy of the spirit in freeing itself from bondage and learning how to commune with nature and value the accumulated wisdom of the world. I do not know what substitute we shall find for our present method, but I do know that the spirit of learning is



hard to foster in a scheme of mechanical processes such as now characterizes the American college. . .

"What is to be done to stem the tide in a matter so important as developing the religious leadership of the next generation and caring for the moral foundations of the nation? Certainly the first consideration is not to remain dogmatically true to the past and guide the feet of students carefully along the pathways of the old faith, even to the repudiation of well established scientific conclusions, as Mr. Bryan and other reactionaries advise. The college's difficulty at present is not with laxity of belief but laxity of life. It must repudiate the idea that formalism is religion and present it as a living force for the regeneration of human nature and the renovation of society."

PRESIDENT SAMUEL PLANTZ, in the *Proceedings of the Association of American Colleges*.

UNITY IN COLLEGE CURRICULA.—"The only thing I can give you, the only thing I can give to students is this: A college should be a place in which every member of the community is attempting to understand what goes on in human life. The limiting principle of a college of liberal arts is this: that nobody has a right to be in the college of liberal arts either as teacher or pupil whose primary interest is not that he is trying to understand human experience as a whole, that is, trying to get hold of human life as an enterprise of the human spirit and to so construe it in terms of his mind that he can take his part better in that enterprise. If we could put that in terms of an examination, that is the kind of examination I would like. If any boy or girl wanted to engage in the task of understanding human experience as a whole so that he might live it better, I would take him in. If we found he did not want that, I would put him out. If any body has a subject he studies or wants to teach in such a way that it gives better understanding of what men are trying to do and ought to be trying to do, if he has a subject that he can teach and wants to teach in that way, I would have him as a teacher in a liberal college. If he hasn't, I would put him out; he hasn't any place."

PRESIDENT ALEXANDER MEIKLEJOHN, in the *Bulletin of the Association of American Colleges*.

THE INFLUENCE OF PUBLIC SENTIMENT UPON EDUCATION.<sup>1</sup>—"In the realm of higher education, I well remember as a young man fifty years ago, when teaching in the middle west, the ardent advocacy of state universities as the necessary expression of that freedom in education that the West believed to be essential to the development of the citizen and the strengthening of the state. There was something of a protest against narrowness and sectarianism in education and an earnest plea for the freedom of instruction in science. It may be well to recall that the nation-wide discussion following the publication of 'The Origin of Species,' by Mr. Darwin in 1859 and the passing of the great Land-Grant Act in 1862 opened up the way for this general discussion. These land-grant colleges in particular were to be the homes of applied science. They dealt naturally and primarily with plant and animal life. They furnished the laboratories of investigation for what men then called natural science, and were free from any controversy as to the right of a professor or a scientist to take into friendly counsel the evolutionary theory in a study of science. The very newness of these institutions and their freedom from traditional bondages enabled them to lay the foundation for a new program in the study of all scientific problems.

#### *The Free University*

"The state universities not associated with the land grant college idea were strongly urged on the ground that they were to be free institutions in which types of education not in favor with the older institutions on private foundations might prevail. The people were persistent and emphatic in their belief that a state university should furnish to all the youth of the state an opportunity to complete a broad and generous education that should not necessarily be dominated by the classical education or by religious sectarianism, but would be dominated by a hospitality toward all justifiable types of education. The more this conception was debated the firmer was the belief in the state university idea. The University of Illinois, for example, was first the Illinois Industrial University. Under the stimulus of public sentiment the university has become in name and in fact the University of Illinois. This institution combines the state university idea, the land-grant idea, and the great conception of a seat

<sup>1</sup> Founder's Day Address at Cornell University.

of learning devoted to the welfare of all the people of the commonwealth.

### *Freedom of Science*

"It is very well known by the older ones among us that this half century, through the debates of the time, developed and quieted a great many questions concerning a supposed antagonism between science and religion and between the interests of education and religion. To this discussion Andrew D. White of Cornell made a notable contribution.

"Interest in that issue unhappily has been renewed recently by a discussion much of which is entirely unworthy of the present state of knowledge and learning. It is not altogether clear, therefore, that the last battle for a responsible freedom has yet been fought and won in the interest of truth and progress. . .

### *The Elective Idea*

"The history of these public institutions will justify the statement that the University of Michigan was the outstanding institution where the elective idea in education found its most cordial acceptance. In the long and oftentimes heated discussions occurring in educational circles concerning the relative importance of the classics as against science, it is worthy of note that the state university stood upon the broad principle of freedom. The name of James B. Angell recalls his notable service in this field. Even the Land-Grant Act carried in its foundation statute the phrase 'without excluding other scientific and classical studies and including military tactics.' The inclusion of that phrase is significant as showing an unwillingness to burn the bridges connecting the earlier ideals while conscious of the fact on the part of the legislators that they were establishing for the United States a type of education of nation-wide application such as was to be found nowhere else in the world. The atmosphere of freedom, so characteristic of the middle western education, encouraged a ready acceptance of the elective idea in education and soon developed vigorous discussion as to the educational value of the subjects introduced. It was at the same time an interesting experiment accompanied by very grave doubt as to the conservatism of the student in making his elections. The fact that some restriction upon the system of free

electives became necessary should not blind us to some important results following the introduction of the elective system. . .

### *Broadening the Curriculum*

"Another slight inheritance from Europe; if not from Germany, was the effort to abandon responsibility for the character and conduct of students and an effort to test their right to a degree almost entirely by their efficiency in passing examinations. The stress or emphasis was to the effect that if a professor should be a scholar he need not be a teacher of high rank; nor a man particularly in sympathy with the student; nor was he particularly responsible for anything else than his own personal scholarship. This view of the professorship and the function of university study led to a revolt against the isolation of a professor. At present we are developing a tendency toward the other extreme of providing a companion for every student as he attends a social function or wanders down the street. The dean of men and the big brother are determined that no innocent student shall go out into society unprotected. . .

"The question of competency still abides. Is it true that too many of our youth are attempting higher education? Is it true that a considerable percentage of these young people are incompetent? The universities appear to think so, but let me assure you that the parents do not agree with us on that issue. They respond by directing attention to the fact that many teachers in our universities are less experienced than the high school teachers. They insist that inferior teaching may account for results as definitely as stupid students. They tell us that not all the responsibility is upon the student and cannot be charged to heredity. They ask that we test our processes of education as carefully as we read our examination papers. We are told that many teachers not yet parents are little more than advanced students. The fathers and mothers are inquiring why these undeveloped teachers are so infallible in their judgments as to the fitness of students to win degrees or escape the follies of the freshman year. Public sentiment proposes to make clear the responsibilities of the teacher. It is obvious that we cannot escape by way of the Binet test unless it shall be applied all around. Then it may reveal the number of morons in our faculties. . . . We cannot correct the evils due to excessive enrollment by protesting that our students are inferior. Some other method awaits our discovery.



*The American Opportunity*

"The question may therefore be properly raised whether this American sentiment must be checked or stimulated. The fact remains that even in the presence of this rising tide a very small percentage of the entire population may be characterized as 'college bred.' Is our civilization able to maintain a situation where ten per cent of the public may be men and women of college education? That percentage has not yet been reached. The tendency to restrict the number of candidates for the professions of law and medicine by lengthening the years of preparation has not yet been entirely successful. There are evidences that these advanced requirements have not eliminated the shyster, the quack or the fake vendor of substitute remedies for our ills. The soapbox orator is still abroad in the land when not confined in Congress, and is exercising an influence that should be suggestive to the conservative man of similar educational attainments. There is no way by which society may be protected against the evils of sophistry and of the appeal to passion except by the aggressive influence of thoughtful, educated men and women. There is no institution that so prepares men and women for this service as does the college and university. The social responsibility, therefore, of the college or the university must not be overlooked in our zeal in the pursuit of academic ideals."

PRESIDENT W. O. THOMPSON, in *School and Society*.

AFTER FIFTY YEARS IN LAND-GRANT COLLEGES.—"Not long since a newly elected university president, referring in his inaugural address to State colleges and universities, characterized them as 'a democracy educating itself.' To what extent is democracy using the institutions it is supporting to prepare leaders for the agricultural class, especially in those social and business relations so rapidly coming to the front? Are the colleges being adjusted to the new demands? A consideration of this question requires that we agree upon what the agricultural college should accomplish for its students in preparing them for future leadership.

"There appears to be no uncertainty in the mind of Secretary Hughes as to one thing college education should accomplish. In his address before the National Education Association he declared that democracy 'needs men trained to think, whose mental muscles



are hard with toil.' He specified 'better mental discipline' as a requisite in the trying times of today, and suggests the classics and mathematics as the educational tools best adapted to that end. There can be no exceptions in the application of these general truths. The value of disciplined minds is not reserved to the professional classes. Such minds are a saving factor in all human activities and relations.

"When it comes to a selection of the educational tools best suited to mental discipline differences of opinion will appear. We may accept as a general principle, however, that those studies have disciplinary value in the measure that they require mind concentration, hard mental effort and that their selection would be within the range of such subjects as language, mathematics, philosophy, social and economic relations and the fundamental sciences pure and applied, having especial reference of course to those subjects directly important to the agricultural people. It is true that many psychologists, perhaps all, reject the idea of general mental discipline from an exercise of the mind in a single direction. They assert that mental toil in mathematics, for instance, gives discipline only in that field or in such fields as are covered by mathematical lines and has no general reaction on the mind. If the psychologists are right, the advice of the distinguished statesman still holds, and there is every reason why specific and severe mental toil should now be imposed in those subjects related to agriculture such as the principles of government, the sociology of rural life, the economics of agricultural production and distribution, the organization and methods of finance and general business relations, not neglecting the idealism of individual and community life. If history teaches us anything as to the basis on which the civic and economic structure of a democracy may safely be reared and maintained, such knowledge should have become the definite possession of the college graduate. It is unfortunate if this knowledge is not imparted or if under the guise of academic freedom the student is so instructed that he comes to regard the affairs of the world as all wrong and must be radically reformed before anything is right, or if he is left intellectually stranded in a maze of theory and speculation. It is especially important that such instruction, or any instruction for that matter, shall be something more than popular dilution. Extension teaching is out of place in the college class room. . .

"If the ultrapractical is excluded from the curriculum, more time could be given to a study of subjects which have a much higher disciplinary, or even practical value, especially those human and economic relations with which the rural people are now so intimately concerned. Many young men enter college who are lacking in the 'intellectual and moral impulses' which alone justify their presence in the college class room. Why should the Nation and State waste their resources on such poor material? Can it be avoided? This is a problem for the future. . .

"In an article lately appearing in the *Independent*, a well-known Wisconsin dairyman is quoted as saying, 'I did not take the agricultural course, but a general one. . . . My horizon has a wider sweep than that confined within the limits of a stanchion. I have specialized in fundamental principles.' The author of this article, who was a student in a prominent agricultural college, falls in with the unmistakable trend of thought at the present time and argues for a more liberal course of study for agricultural students.

"Men engaged in extension work have frequently deplored to me their lack of a knowledge of fundamentals. It is significant that in another field of vocational education, the engineering, the trend of opinion on the part of many leading teachers is strongly toward giving a larger proportion of attention to the principles underlying engineering education.

"It is hoped that what has been said will not be regarded as antagonistic to vocational education, but rather as the expression of a conviction that the four years of college life are set apart for developing high ideals, intellectual vision, and imparting fundamental knowledge, a period not to be invaded by the simple details of practice.

"Your attention is called briefly to one more consideration. We are in the flood tide of commercialism. Our educational agencies from the high school, with instruction in typewriting, to the university, with a course in salesmanship, are attempting to develop money-earning capacity. It cannot be successfully denied that the idealism so essential to the best interests of community and national life is more or less overshadowed in school and college education by the attention given to industrial and commercial aims. How is it with the colleges of agriculture? Are they in spirit and influence distinctly idealistic or are they so dominated by considerations of vocational

efficiency as to exclude the exaltation of moral and spiritual attainments? A democracy may well insist that those of its number who dictate the policies of its higher education shall give full recognition to those personal and civic virtues which are the only basis of good government and social order.

"Your charitable consideration is asked if this discussion has dealt with the obvious or with policies and conditions already attained. However this may be, let us hold fast to the truth exemplified by all human experience, that the great essential in the education which best fits a man for an efficient life service, whatever the field in which the service is rendered, is the cultivation of the intellectual and spiritual faculties."

DR. W. H. JORDAN, President of the Association of Land-Grant Colleges, in *School Life*.

RESEARCH AND TEACHING.—"The promotion of pure science has been acknowledged as exceedingly good business. The American business man has been quick to appreciate the value of research, once its meaning was brought home to him, and he is now enthusiastic in opening new paths to hiding-places of nature. That such paths are apt to lead undeviatingly from his own private domain is here of secondary importance.

"The reaction of all this on the professor may well be looked at with misgiving. The college in the future, as heretofore, will necessarily insist on the primary importance of teaching. Instructors come to us with functionally well-equipped brains, aglow with the brightness of a young man's ardor, strong in the beautiful hope of achievement and with youth's illusions all undimmed—only to be forever confronted by the elusive response of the average student. Nothing is so deadening as the prolonged contact with the uninformed, the indifferent; for it keeps a low standard of comparison always in view. Eventually a man will measure his own mental stature by its elevation above that humble level. If the incentives to a stimulating competition, to an emulation among professional compeers, are also lacking, the distortion of intellectual values may be complete. A persistent urge, like a physical field of force, however weak, is a very dangerous agency. Watching sleeplessly, like Satan, over the course of things, it may even convert a faculty of high aims and specifically equipped

scholarship into a body of schoolmasters. The exalted obligation incident to exceptional training is creative, an enlargement of the boundaries of knowledge, a new voice in art; but its fruition may degenerate into some academically dignified clerkship. A mute inglorious Darwin may be detecting new group affinities among old courses, or piecing together the parts of some academic picture puzzle. . .

"In the end, I fear, the trusts, as we fondly call them, will have absorbed and assimilated *l'élan vital*, the soul of the university. It is they who will point out to our bewildered gaze the sweep of new horizons and the flotsam from undiscovered shores. Our faculties will have to teach what they have been taught by the great business corporations. These will hereafter break new pathways into the unknown, and it will be for us to tell the uninformed the Ultima Thule of their progress. The university will be the humble expository mechanism of the intellectual accomplishments of commercial enterprise. In brief, there will be a complete inversion of the method by which the world's knowledge has deepened in the past."

DEAN BARUS, in the *Annual Report of the President*, Brown University.

INTELLIGENCE TESTS.<sup>1</sup>—"1. The value of mental tests as aids in grading school pupils, diagnosing individual disabilities and selecting individuals for temporary employments requiring ability to learn new duties quickly (as in the Army tests) is unquestioned.

"2. The use of mental tests on a wide scale to group individuals during childhood and youth in a way that will 'load the dice' as to future occupation, opportunity, mode of life or social status is to be condemned:

(a) Because of the present uncertainty regarding the accuracy of the tests as measures of *innate* mentality.

(b) Because of the prevailing uncertainty (not to say profound ignorance) concerning the part played by *innate mentality* as compared with other presumably innate factors in determining achievement.

(c) Because of the clear dependence of democratic institutions upon a widespread community of ideas, ideals, standards, aspirations and sympathies, which can conceivably be provided, if at all, only by a

<sup>1</sup> Some remarks addressed to the Psychology Club of Teachers College, Columbia University, November 22, 1922.



*common* culture, which, in turn, would be prevented by any considerable amount of differentiation or segregation in elementary education.

"3. The application of the mental-test theory to education is fraught with especial peril because the results of the tests are expressed in relative terms (whether of 'mental age' or of 'intelligence quotients'). Democratic education is fundamentally interested not in the possibility that this individual may surpass that individual, but rather in the absolute advancement of both and of all. The whole tendency of the theory of testing, of its technique and of its formulation of results, has been to obscure absolute gains.

"4. Assuming that intelligence means (among other things) ability to grasp abstract conceptions, education is interested both in the growth of that ability and *in the number and quality of the abstract conceptions that are grasped*. . .

"In comprehending an abstract conception (for example, the notion of 'ratio,' the idea of 'gravity,' the conception of 'representative government') different minds work with varying degrees of rapidity, due to the readiness or the slowness with which they pass from the particular to the general.

"How far 'intelligence' may grow *after* the growth due to natural forces has ceased—whether, indeed, it grows at all after maturity—are questions for which there is not as yet even the semblance of an answer. It can hardly be denied, however, that *something* grows with the continued stimulus of systematic education (or of experience in fields that constantly exercise the abilities in question). If it be objected that this something is not 'intelligence,' the answer is that it then represents something rather more important than intelligence.

"Whatever the attitude of the individual psychologist may be toward the significance of native intelligence, the psychologists as a group owe it to the public (in view of the wide interest that has been aroused in the tests and the peril that lies in current misinterpretations):

(a) To set forth clearly the fundamental assumption that underlies any effort to infer differences in native mentality from the results of any mental test—the assumption, namely, that, in respect of the individual compared, educational and other environmental stimuli have had a chance to operate equally.

(b) To deny publicly and as a group the assumption that the results



of the Army tests constitute a just appraisal of the *native* intelligence of the American people.

(c) To make clear to the public the purely relative significance in which the terms 'mental age' and 'intelligence quotient' are used.

(d) To discourage the use of phraseology of the following type: 'So-and-so (an adult) has the *mind* of a ten-year-old child.' "

W. C. BAGLEY, in *School and Society*.

EDUCATION FOR DEMOCRACY.—"Now there was a time in human history when men got their education in schools. It was a time when the full realm of human knowledge was relatively small. It has now become impossible for schools and colleges doing their very best, to give any man or any woman a substantial possession of a large part of the available human knowledge. All knowledge has so expanded under modern conditions that there is not only too much for any one man to know, but there is too much about infinitely subdivided subdivisions of great branches of knowledge for any man to know. . .

"The net result is that the school and the college now are not able to give a man a mastery of the field of knowledge of the kind that used to be possible. I am afraid that many schools undertake to present to their students cards of introduction to the various branches of knowledge in the hope they will improve the acquaintance later in life.

"I do not believe that to be the function of the school. I have a son. He has some difficulty with his various courses, five in number. I am having them reduced to four. I may have them reduced to three, or two, or one, and when I get to one, I may discard it and take another, but I am finally going to find a subject which he can be taught in such fashion that at the end of each day he will be conscious that he is the absolute master of that day's lesson and know that his first and general speaking acquaintance with a large number of outsiders in the field of knowledge is no substitute for that sense of mastery.

"As I look back on my own life, like the boys in the army, I am conscious of little of the knowledge which I got either in school or college. I am perfectly certain that I could not in a week brush up on the binomial theorem. I am equally certain that I could not tell in what two forms sulphur crystallizes. In fact, it may be three for all I know.

"What is it that I bring out of my experience in school and college that is an imperishably rich possession? The contact with four or five great, luminous, inspiring personalities. . . . Two or three college professors, and then a law school teacher or two. When I try to think of the rest of my college course, it always becomes dim and obscure. I know I went through it because my university, which has the truth in its shield, has certified to the fact. But those great personalities are just as vital and just as vivid and just as influential to me now as they were in the days when I was young and tender and green and easily taken by the hand and led. . . .

"We have had a great world war. We have strewn the face of the earth with the bodies of the sacrifices that we have made to the cause of liberty and civilization and now we are at the gathering up of the fruits of that conflict and we are mystified and puzzled that we stumble as we try to get on our feet again; we are shaken from our foundations by the catastrophe that shook the world and threatened to overcome, and, with the appearance of fresh catastrophes that are lowering before our eyes overseas, we are wondering if there is force enough to preserve the thing we call civilization. I say to you, my friends, that there is, and it lies with you who are the representatives of the intellectual forces of this great democracy.

"The chief business of a democracy is education. The only way democracies can outlast the tests being put to them now is by the boys and girls who go through your hands and pass by your personality, coming out citizens with a national bias and a great elevation of purpose reflecting from your characters when they leave your schools."

HONORABLE NEWTON D. BAKER, address before the Department of Superintendence, National Education Association.

WEALTH AND BENEFACTION.—"Now comes Dr. Pritchett with the hint that accumulated wealth cannot even be *given away* to the benefit of the public. And the question is—what ground is left on which to defend large fortunes? Socialists have always declared against them. The one defense which they have never quite gotten round is that wealth makes benefactions possible and supports the public good in a way that this could not be done—or *would not be done*—by small contributions or general assessment."

'A Modest Inquirer' in *Science*.

BASES OF BRYANISM.—“The chief cornerstone of Bryan’s philosophy is thus laid in the Hebrew maxim that ‘it is not in man that walketh to direct his steps.’ If this is not giving a dog a bad name in order to hang him, it is at least attributing to human nature such a constitution as without further ado necessitates the ministration of the traditional deity. Man’s extremity is made, as always, the theologian’s opportunity; and no time is lost in capitalizing this human extremity to justify the foisting upon man of a fundamental and thoroughgoing religious authoritarianism. . . . To compensate for the great discrepancy between his religious philosophy of dominance, which is held to be fundamental, and his democratic political philosophy, Mr. Bryan compartmentizes human nature and then finds—such is the deviousness of rationalizing—that the doctrine of original sin applies less to one department of human nature than to another. While on the whole, man will certainly not do to trust in fundamentals, yet if one can find the right spot in man’s nature, he is not so bad after all. And this moral oasis in the desert of corrupt human nature is the heart of man. So much better is the heart than the head, according to Mr. Bryan, that one might be led to conclude that Eve ate the fatal apple, not because her heart was set upon it, but because she syllogized herself into its acceptance. Indeed, he does not omit to say that ‘the conflict that rages between the mind and the heart is the one great conflict in every life. . . . Let it be made plain once for all that Mr. Bryan wars on agnosticism, atheism, even evolution only incidentally. These are but the foliage; he strikes at the root, and the root of all modern evil is the too high appraisal set upon mind. His quarrel with Darwinism is motivated here; for, as he declares, ‘the natural and inevitable tendency of Darwinism is to exalt the mind at the expense of the heart.’ ‘Religion is a matter of the heart, and the impulses of the heart often seem foolish to the mind.’ ‘Hearts understand each other.’ And finally he summarizes in a burst of oratory: ‘I fear the plutocracy of wealth; I respect the aristocracy of learning; but I thank God for the democracy of the heart. It is upon the heart level that we meet, it is by the characteristics of the heart that we best know and best remember each other’. . .

“All this but means that Mr. Bryan has stated in terms of modern relevancy the never-dying challenge to intelligence. What seems to

be a complaint at modern theories can most profitably be interpreted as a wail from inarticulate men that they have not been let in on modern advance. . . . Average men must be increasingly let in on the processes that lead to inventions, on the theories of life and the hypotheses of progress, if the products are not to cease. As simple and as convincing as are the elementary observations on which Darwin based his evolutionary philosophy of life, more than half a century after the general acceptance of this philosophy by men of science the average man remains utterly ignorant of the evidence that has convinced all who have examined it fully. The average man expresses all he knows about evolution in his retort that you may claim the monkey for an ancestor if you wish, but as for him, he prefers another line of descent. So aristocratic is the pedigree of the professions that most professional men actually seem to prefer to confer benefits without divulging knowledge of the means by which they come. The average man takes a tonsilectomy or an operation for appendicitis without softening in the least his opposition to evolution. Indeed many a doctor, instead of conceiving himself as an educator, apparently regards himself as having the valuable key to a kind of esoteric knowledge. The customary reticence of medical practitioners is more befitting the magic past of medicine than its high mission in a democracy. In the face of such neglected opportunities, science cannot reply that she is willing to give, but that the common man is not ready to receive enlightenment. Science must take up the double burden of intelligence, not only to sow the seed, but to prepare the ground as well; not only to give, but to reconcile the receiver to the gift. Whatever is not worthy to share is not worthy to hold. . . .

"This point will bear emphasis without becoming labored. Science cannot reach its goal separated from the people, and yet science is separated from the people. If one would see how widely, let him turn round and look at the shadows on the wall cast by the passing panorama. Mr. Bryan's dualistic psychology is the reflection; the heart and the head are at outs, and Mr. Bryan allies himself with the heart, as if the heart could arrive without the head! But Mr. Bryan chooses sides because he finds there are two sides and a battle is raging. He chooses the heart because somebody before him has chosen the head, as if the head could arrive without the heart! A dualistic psychology, as well as a dualistic cosmology, reflects a schism in



humanity, a deplorable schism which it is the task of wise men to heal. This burden falls primarily upon the scientists, not only because they are the ones who are responsible for it and because they are the only ones who are able to bear the burden, but because also, insofar as only one side can be in the right, the common man is in the right. The emotional life of man is *primary*. 'All thought,' as James Russell Lowell truly observed, 'begins in feeling.' But the error of the average man consists in wishing to run amuck because he is granted a right to run freely. Since humanity finds itself possessed with intelligence as an effective instrument for the safety and enrichment of its emotional life, the common man must be prevailed upon not to discard what mankind has so hardly won and so badly needs. Science must humbly reinstate itself as the instrument of humanity's desires. The needs of humanity render this no more imperative than does the perpetuation of science itself. And since intelligence does exist as the instrument of human need, intelligence must save its life by losing its pride. The *impasse* in which all such argument seems to end ought to become a standing challenge to wise men; for if science cannot live with the average man, it certainly cannot live without him. This is the dilemma that betokens social progress, for in its resolution the average man ceases to be the common man."

T. V. SMITH, in the *Scientific Monthly*.

SCIENCE AND RELIGION.—"In a joint statement representative groups of scientists, religious leaders, and men of affairs unite in declaring that science and religion 'meet distinctive human needs and in the rounding out of human life they supplement rather than displace or oppose each other.' This is intended to counteract anti-evolution and anti-science propaganda as well as anti-religious movements. Dr. R. A. Millikan, physicist and director of the Norman Bridge Laboratory of Physics at Pasadena, Calif., who formulated and secured the signatures to the statement, said in explaining its object:

"The purpose is to assist in correcting two erroneous impressions which seem to be current among certain groups of uninformed persons. The first is that religion today stands for mediaeval theology; the second that science is materialistic and irreligious.'"

The full statement and signatories are:

We, the undersigned, deeply regret that in recent controversies there has been a tendency to present science and religion as irreconcilable and antagonistic domains of thought, for in fact they meet distinct human needs, and in the rounding out of human life they supplement rather than displace or oppose each other.

The purpose of science is to develop, without prejudice or preconception of any kind, a knowledge of the facts, the laws, and the processes of nature. The even more important task of religion, on the other hand, is to develop the consciences, the ideals, and the aspirations of mankind. Each of these two activities represents a deep and vital function of the soul of man, and both are necessary for the life, the progress, and the happiness of the human race.

It is a sublime conception of God which is furnished by science, and one wholly consonant with the highest ideals of religion, when it represents Him as revealing Himself through countless ages in the development of the earth as an abode for man and in the age-long inbreathing of life into its constituent matter, culminating in man with his spiritual nature and all his God-like powers.

The signers are:

Bishop William Lawrence; Bishop William Thomas Manning; Dr. Henry Van Dyke; Dr. James I. Vance; President Clarence A. Barbour; President Ernest D. Burton; President Henry Churchill King; Dr. Robert E. Brown; Bishop Francis John McConnell; Dr. Peter Ainslie; Charles D. Walcott; Henry Fairfield Osborne; Edwin Grant Conklin; James Rowland Angell; John Merle Coulter; Michael I. Pupin; William James Mayo; George David Birkhoff; Arthur A. Noyes; William Wallace Campbell; John J. Carty; Robert A. Millikan; William Henry Welch; John C. Merriam; Gano Dunn; Herbert C. Hoover; James John Davis; David F. Houston; Frank O. Lowden; John Sharp Williams; Rear Admiral William S. Sims; Harry Bates Thayer; Julius Kruttschnitt; Frank A. Vanderlip; Henry S. Pritchett.

Dr. Edwin E. Slosson says of this: "Timid souls who have become alarmed at the idea that religion and science are inevitable antagonists should be assured by the 'Joint Statement Upon the Relations of Religion and Science,' signed by a number of the foremost scientists, religious leaders and men of affairs of the United States. These distinguished thinkers in various fields found it easy to agree upon a simple statement of their opinion of the relation of religion and science and their belief that both have a place in modern life. No one can

question either the ability or sincerity of such men as these and since their adhesion to the declaration is purely voluntary it is evident that they find no essential incompatibility between a personal religious faith and a scientific view of the universe.

"The list of signers could be extended indefinitely, in fact the statement probably represents in general the position of most of the educated and moderate minded men of our time and country.

"It is a curious feature of the present situation that the laity is more alarmed over the advances of science than the clergy. That is, those who know the most about theology and who have most at stake in the church are most willing to welcome historical criticism and scientific research. The real conflict is not between science and religion as such, but rather between dogmatic and intolerant religionists and scientists on the one side, and liberal and tolerant religionist and scientists on the other side. It is more a difference of temperament than of opinion. The effort to fetter freedom of investigation or to force thought into fixed formulas is equally fatal in science and religion.

"Overmuch fear of heresy indicates lack of faith. Scientific men have such absolute confidence in the validity of the scientific method that they permit their most fundamental principles to be challenged even in their own societies. Chemists listen without a shudder to destructive attacks upon the immutability of the elements and the indivisibility of the atom. The Royal Society of London even applauds a speaker who sets an upstart foreigner like Einstein above Newton, one of its oldest and most venerated members.

"The papers have reported a half dozen cases of professors who have been dismissed from educational institutions under ecclesiastical control for teaching evolution but there has been no retaliation from those whom some call the 'enemies of religion.' I never heard of the National Academy of Sciences expelling a member because he was suspected of being a Presbyterian or of the American Association for the Advancement of Science blackballing a man because he had been baptized. Girard College is the only institution that excludes clergymen by charter and I understand that the doorkeeper there is not very vigilant in searching every visitor to see if he has a dogma concealed about his person. If we begin to rewrite our textbooks in science to suit a single sect, or section of a sect, we may soon have

Methodist and Baptist zoologies, Protestant and Catholic chemistries, Jewish and Christian theories of gravitation, as we now have northern and southern histories, and proletarian and capitalistic economics.

"Science and religion, properly understood, need never conflict, but should always cooperate in the advancement of the human race, for each supplies what the other lacks. Science provides the means by which human toil and suffering may be alleviated and shows how human life may be lengthened and enhanced. Religion gives inspiration to the individual, an aspiration to a high ideal. Science gives eyes to religion. Religion gives a heart to science. Knowledge is power. But power is impotent unless set in action and dangerous if set in action by the wrong motive. Religion, unless enlightened by science, wastes its energies in vague longings or in fruitless and sometimes harmless efforts to remedy bodily or social ills.

"Science may discover what conduct is most conducive to human welfare in the future. But science as such cannot go beyond this. It can point out the best way but it cannot inspire the individual voluntarily to follow it against his personal interest. Mere knowledge cannot of itself supply the motive for self-sacrifice for others or for the future. It cannot make a mother risk her life for her child or a man risk his for his country. The altruistic impulse is a religious instinct, whether it is recognized as such or not. Science can supply the motive power. Religion must supply the motive."

*Boston Transcript.*



## LOCAL AND CHAPTER NOTES

AMHERST; THE PLAN FOR ALUMNI READING AND STUDY.—“In the belief that a college should serve its graduates by helping them to obtain the best available knowledge of whatever vitally interests them, Amherst College offers to its alumni a plan by which they may systematically continue, under the guidance of the College, studies begun during, or undertaken since, their undergraduate years. Unlike university extension work, the plan will not predetermine topics of study in which alumni may be interested, but will seek to serve each alumnus in the field of his special interest, whatever it may be. Few men leave Amherst without a quickened interest in some phase of the curriculum, but in the wear and tear of business or professional life this interest frequently remains undeveloped, and the serious reading done by the average college graduate is merely desultory. Again, a typical list of books read by Amherst alumni during the past two years might include Keynes' 'Economic Consequences of the Peace,' or Slosson's 'Creative Chemistry,' Loews' 'Convention and Revolt in Poetry,' Strachey's 'Queen Victoria,' Adams' 'Mont St. Michel and Chartres,' or Wells' 'Outline of History.' Such books as these open up fascinating subjects of inquiry, which might profitably and pleasantly be followed by further reading along the same line. But to find the next book to read without great loss of time is a difficulty that few casual readers surmount. To come into direct personal touch with others interested in the same subject is not always easy. To be able to secure help and information on puzzling points from an expert in the subject is a valuable privilege. The plan for Alumni Reading and Study is intended to meet such difficulties as these. It will place the resources of the College at the service of its graduates in every possible way. It will offer directed reading courses in any field of knowledge which an alumnus wishes to study. It will organize at convenient times during the year week-end group conferences at Amherst for the discussion of subjects of particular interest to the alumni who wish to attend. Similar group conferences may be held at other alumni association centers throughout the country. Not only reading courses, but the books themselves may be provided from the College Library at a nominal rental for those alumni who are not able to reach an adequate book collection. The staff directing the work may be extended to include graduates of the College on the

faculties of other colleges and universities. Such features of the program as these will be put into effect and extended as rapidly as the demand for them warrants.

"And finally, if the plan proves useful to Amherst alumni, there is no reason why it should not be made useful to their friends also. In these possibilities lies the vision of a new and greater Amherst, a college touching and stimulating the minds of thousands instead of hundreds of men at the same time, and bringing its influence to bear not merely on the threshold of maturity but on the entire lives of its graduates. It remains for the alumni to decide whether this vision of a college community growing with the growth of the College shall be realized. . .

*Remarks of President Meiklejohn*

"I think there are one or two things that can be said. In the first place, quite obviously we cannot do much with the individual student who wants special attention. For example, our scientific men cannot give technical advice to individual men. We cannot give expert assistance to men in their professional work, naturally. Perhaps we could not do it anyway, but if we could, we must not try it.

"And again, if there are men who are already doing advanced work in their fields, we could not be expected to do very much with them. We must, I think, count on getting men who want, in general, liberal study, not too highly specialized, who can be bound together in groups so that they themselves as a group will study with each other, share their common interests and do it under our stimulation and direction. It must, however, I am pretty sure, be kept on that general plane of the study of groups with stimulation and direction by the members of the faculty. . .

"Now, I think the same question comes with regard to these alumni classes. By whom shall the leading of these classes be done? A suggestion has been made that we should add to our force one or two or three or four men who will give special attention to these classes. May I say to you, members of the alumni body, I hope you won't take it in that form. I hope we are not going to give you as leaders men who are not really members of the teaching force, who are brought in for this purpose. You won't, if that is the case, be getting real touch with the College. If there must be addition to our force

for this purpose, I hope it will be a genuine addition to our departments made in such a way that all the men, or at least the best men we have, can be in touch with the members of these groups so that you will know what is really going on in the minds and in the spirit of the College. . .

"Finally, I believe this movement is simply one phase of a thing that is going to happen either in this way or some other way, or in this way plus some other way, just as sure as fate. This is simply one incident in a demand which is now being made by our colleges upon themselves, namely, that the adults, that the men of affairs, that Americans who are engaged in carrying on the life of this country, shall be bound together into living associations by common ideals and common beliefs and common questions and common thinking. It marks the end of the day when men could talk of colleges as places of mere boyish association, as places of mere sentimental connection, as places where they were in their childhood. It means that America today, here in Amherst and everywhere else, is getting to understand that men, if they are to do what Americans have to do, must be living in great associations of ideas and thoughts and problems and attempts to understand.

"And I say to you what I think can be said of other colleges too: Amherst is not five hundred boys being educated by fifty teachers and with five thousand alumni looking on. Not that. Amherst is and is going to be, as other colleges are and are going to be, five or six thousand men gathered together in one single, tremendous attempt to live intelligently, to live right because intelligently, in the midst of the life of this American people.

*Remarks of Mr. Robert A. Woods, '86*

"We are, without doubt, entering upon an experiment. It will have to be pulled down out of the air. There will necessarily be a certain amount, and perhaps a good deal, of the kind of fighting that beats the air for a time before it finds just what it is after. One of the things which the Alumni Council clearly recognizes is that, in so far as they are passionate about this matter, and they seem to be rather enthusiastic, they are pledged to the passion of patience. We must all realize that, in all its stages, it is going to take time. . .

"The Alumni Council stands ready and eager to do its full part in

the way of working out the general plan. It certainly is a very inspiring revelation that the graduates of the College, who have come often to renew their memories of some of the fine loyalties of college life, their memories of its valor on the field, and in later years to take some part in the actual administration of the College, have this time assembled for a fourth reason, the vital, significant reason of participating in the intrinsic spiritual life of the College as it is today. That is a great step forward. . .

"I wonder if this movement on the part of the alumni of the College does not indicate that they have reached a deeper and broader and more long-range conception of education for themselves and for the whole life and influence of the College than they have ever had before.

"Isn't it clear that while the process is something we cannot exactly foreshadow—and we should err if we tried to define it too clearly in the beginning—it is something that is going to answer many of its own problems? Take the concern that the faculty naturally feel about undertaking another large task in addition to the amply sufficient responsibilities they now have. I wonder whether it will not be very clear that this is going to be a case of the function that will help to make the organ. The enterprise itself is going to quicken us all as to the needs and the possibilities of the College in its whole educational service. It would seem probable Mr. President, that this development will begin within a reasonable time to reinforce the faculty precisely in the way which you have outlined. I feel certain that this is itself one of the ends which the alumni of the College have in mind with regard to it. In my own thought about the matter this has always been quite foremost—that this plan, by the very reciprocities which it would create, would tend to broaden and deepen the resources of the College through its faculty. . .

*Report of Committee on Alumni Reading and Study*

"Just in a very tentative way, the suggestion boils down to something like this—that the different departments of the College should present in outline, and preferably in a narrative form, what they are trying to do in their courses, the interests and the outlook that they are trying to develop. Fortunately, we have a specimen that sets forth very satisfactorily what the men in the different groups are looking for in the way of such an outline. Professor Hamilton pre-



pared a little while ago for one of the economic journals an extremely interesting sketch of what he was trying to do in his course, a statement that could be read with interest by anyone who had even a slight acquaintance with the subject. It is a very interesting document. On the basis of such outlines, made concrete with historical and biographical allusions and a few references to literature, the graduates of the College then can express themselves broadly or in detail as to what phases of the matter interest them. They can suggest specific points for discussion aside from the outline. Then the men of the faculty, in the different departments, on the basis of that come-back, can begin to see what is really representative, what embodies a real solidity of interest on the part of the alumni. They then can begin to estimate how far the College could go, as it is now organized in meeting the needs thus expressed and classified.

"It is possible that the faculty might be flooded with scattered inquiries. It is suggested that, particularly at first, the invitation that would bring out such responses should be so couched that the faculty would not be obliged to answer all requests for information individually. Later on, with better organization and a bigger force it might be possible to answer any inquiry that came in. . .

"Now the next suggestion is that there should be regional committees appointed, a few at first representing the larger cities; and that those regional committees should arrange this year, each of them, for one local institute. The institute would shape itself like this: some pleasant out-of-town place would be selected—a hotel or, preferably, an educational institution might be made available. The graduates in that section would come there, say, Friday evening at dinner time and stay over until Saturday evening. Perhaps they would come Saturday morning and stay over Sunday. Have it out of town so when the men came they would not be tempted to find their way back to their offices too soon. Have it carry through for twenty-four hours; and have as leaders one or two members of the faculty on hand and one or two well-qualified alumni outside the Amherst faculty.

"If we can carry through two or three of those local institutes, that would mean a very definite step in getting the project under way. They would learn the value of team play among groups of alumni who cannot reach Amherst. It is hoped also that there may be one or two week-end gatherings arranged at Amherst during the year. . .

"If we can get the alumni of Amherst College to have a quite special feeling that the educational process is a continuing, vital thing to them, they are going to become as a body a definitely more influential force in the way of disseminating educational influence throughout the country. Should it happen that other colleges should undertake similar plans, the college graduates of the country might create a powerful united front against the intrenchments of ignorance and prejudice which lie athwart every promising avenue of national progress. What we want is not merely an educational leadership in the United States. We want a leadership of education; so that every man in whatever community he lives will be demonstrating the influence of education and passing it on to others."

*Amherst Graduates' Quarterly.*

EXTRACTS FROM THE SPECIAL BULLETIN ENTITLED "CONFERENCE ON ALUMNI READING AND STUDY" (NOVEMBER 17, 1922).—"It had been discovered, from the return cards received, that the interests of most of the alumni focused in seven fields; economics, literature, history, philosophy and psychology, political science and international relations, religion, and science. Arrangements had been made for individual conferences for each of these groups; and after the addresses by the President and Mr. Woods, the alumni adjourned to the various group seminar rooms in the Converse Library, where they met the professors in the respective groups, for further discussion of plans and methods."

*Report of the Economics Group<sup>1</sup>*

The alumni who were interested in economics met with the teachers of the department in the Romance Language Room of the Library at 2.20 P. M., November 17, 1922. About twenty-five were present. Each person spoke briefly of his particular interest in the subject and made suggestions on how the department might best serve the alumni. Out of this it developed that there were three main lines of interest:

1. Some men were interested in subjects which related directly to their own vocations.
2. Some of the alumni wanted us to tell them what was really significant and worth reading out of the great flood of literature on economics.
3. Many of the alumni were interested in having the department give them something to think about.

<sup>1</sup> We reprint here one only of these Reports—a typical example.

In order of importance, the interests were the reverse of that given. There was a general consensus of opinion that the department could satisfy the second and third of these demands, but that the staff in knowledge and training was not prepared to deal with the first.

Several very interesting suggestions for the development of this work came from those who were present at the conference. The following are the more important:

1. That the scheme of reading and study for the present be kept as flexible as possible.
2. That the alumni write the members of the department making suggestions of ways in which it could serve them.
3. That from time to time the department issue pamphlets consisting of reading lists, short essays, discussions and the like.
4. That study groups be organized in New York, Providence, Boston, and other places where four or five men interested in a common program of reading and study could get together.
5. That twice a year, at the meeting of the Alumni Council in November and at Commencement in June, alumni who have had a common course in reading might meet at Amherst for informal discussion.
6. That for some four or five weeks during the summer the college open its doors to the alumni for informal conferences. There should be few formal lectures and very little formal class work, but every opportunity for reading, conference, and study. An alumnus should feel free to come and to go at any time he pleases, even though he could stay for only a few days. The value of the scheme would lie in his knowing that if he dropped in here during the course of the conference he would find others interested in his intellectual problems.

At the close of the meeting two resolutions were carried unanimously.

1. That the Department of Economics be requested to prepare pamphlets for the guidance of reading and study in economics.
2. That the alumni present elect a committee of three to cooperate with the members of the department in this venture and in the further development of reading and study in economics.

The alumni elected Mr. Charles A. Andrews, '95, chairman of the committee, and asked him to name the two other members of the committee. He named Mr. George M. Goddard, '87, and Mr. Richmond Mayo Smith, '09, as sub-committee. At four o'clock the conference adjourned.

A few minutes after four the members of the department met with the committee of the alumni. Some two hours were spent in discussing the needs for reading and study. Out of the discussion came the following program:

1. The members of the department are to prepare a short reading list of books on economics, giving attention to the development of economics, the coming of industrialism, business cycles, industrial relations, and programs for economic reform. Each of the books listed is to be followed by a short note. The object of these notes is to tell the alumnus whether or not the book in question is a good book for *him* to read. Mr. Andrews is to write an introduction to the list.

The department will soon prepare two or three pamphlets, the object of which is to satisfy the demand of the alumni for "something to think about." The department is ready to prepare two short pamphlets each containing a number of readings. One of these is to deal with "What is Progress?" and the other with "The Coming of the Machine."

We do not regard the preparation of these pamphlets as really getting the program for alumni reading and study under way, but it is the opinion both of the department and of the committee that it is a tentative step which is worth the trial. The department is ready to go forward with the preparation of these pamphlets just as soon as they have the sanction of the larger committee which has the matter in charge. They are, however, not committed to the venture if this committee has something better to suggest.

WALTON H. HAMILTON, *Chairman*

### *Summary of Methods Proposed*

#### 1. General methods

Book lists, general or topical, annotated  
Groups organized locally  
Conferences at Amherst  
Limited personal attention

#### 2. Study helps

Outlines  
Syllabi  
Pamphlets, specially prepared  
Current information on magazines and books



*Methods Proposed—Tabulated by Fields*

Booklist	Econ.	His.	Lit.	Phil.	Pol. Sc.	Relig.	Sci.
General	x		x	x			x
Topical	x	x	x	x	x	x	x
Directions						x	
Outline of field				x	x		x
Syllabus of course						x	
Amherst conferences	x	x		x		x	x
Group organization	x	x	x	x	x	x	
Personal attention						x	x
Intercorrespondence				x		x	
Essays, discussions furnished	x						
Current information					x		
Reports of reading or study		x					

*Summary of Fields and Topics***ECONOMICS**

1. What is progress?
2. The coming of the machine
3. Special topics
  - (a) Development of economics
  - (b) Coming of industrialism
  - (c) Business cycles
  - (d) Industrial relations
  - (e) Programs for economic reform

**HISTORY**

1. Narrative history
  - (a) Of the general European field
  - (b) Of the United States
  - (c) Of the expansion of Europe in the nineteenth century
2. Biographical: to be arranged so far as possible if specially requested
3. Special topics
  - (a) States Rights from colonial times to the present
  - (b) Federal taxation

- (c) Liberty
- (d) The social development of Britain and the British Dominions in the nineteenth century
- (e) The relations of backward and advanced peoples in the nineteenth century

#### LITERATURE

##### 1. Special topics

- (a) General introduction to literature
- (b) Modern poetry, British and American
- (c) Nineteenth century literature
- (d) American literature
- (e) Shakespeare
- (f) Theory of poetry
- (g) Theory of drama
- (h) Types of fiction

#### PHILOSOPHY

##### 1. Current college courses by book lists

- (a) Introduction to philosophy
- (b) History of philosophy
- (c) The moral order
- (d) Psychology
- (e) Philosophy of religion
- (f) Social and political ideals

##### 2. Special topic

- (a) Idealism vs. pragmatism

#### POLITICAL SCIENCE

##### 1. Special topics

- (a) International relations
- (b) American government
- (c) The current college courses

#### RELIGION

##### 1. Special topics

- (a) The Old Testament
- (b) History of religions

#### SCIENCE

##### 1. Historical course

##### 2. Biographical course

3. General course, in each science
4. Special topics (see conference report) in
  - (a) Mathematics
  - (b) Physics
  - (c) Organic chemistry
  - (d) Astronomy
  - (e) Geology
  - (f) Biology
  - (g) Botany
  - (h) Health and disease

ARIZONA.—The U. S. Bureau of Education has recently published a Bulletin of 90 pages on a survey made at the request of the Regents by the following representatives of the Bureau of Education; President Kolbe of the Municipal University of Akron; Mr. Blauch, specialist in charge of Land-Grant College statistics; and Dr. Zook, specialist in Higher Education.

HARVARD, ADMISSION POLICY.—The following are extracts from the Report of the Committee appointed "to consider and report to the Governing Boards principles and methods for more effective sifting of candidates for admission to the University."

1. Foremost, by reason of publicity and apparent urgency, among the matters to be examined by your Committee was the question of racial proportion in the student body. This, however, was only one phase of the problem studied, and as the investigation progressed the entire Committee became convinced that the whole question should be approached not from the standpoint of race, but in an effort to accomplish a proper selection of individuals among the available candidates for admission to Harvard College. The Committee believes that if the intellectually unfit can be eliminated and if our entrance requirements can be adjusted to the work of good schools not now sending men to Harvard College, our whole problem can be met; and that the student body will be properly representative of all groups in our national life.

2. Concerning proportional representation, your Committee is unanimous in recommending that no departure be made from the policy that has so long approved itself—the policy of equal opportunity for all regardless of race and religion. Any action liable to

interpretation as an acceptance of the principle of racial discrimination would to many seem like a dangerous surrender of traditional ideals.

3. Your Committee is opposed, also, under present conditions, to an arbitrary limitation of the number of students to be admitted, and to the policy of giving preference to sons of graduates. Unearned exemptions and favors are apt to be demoralizing to their recipients. And if the size of our Freshman class is to be reduced, the reduction can best be accomplished by raising the standard for admission.

4. The Committee recommends several steps in the way of excluding inferior scholars.

(a) A considerable number of such students now accepted for admission can be shut out by stricter enforcement of our existing rules, under both the New and the Old Plan, in the case of applicants whose records fall just below the normally required mark; and a still larger group of such students can be eliminated by raising that mark itself, particularly under the Old Plan.

(b) Moreover, we believe that ability to write passable English should be insisted upon by the College, as it is a good criterion of mental proficiency and an indispensable prerequisite to college study. We therefore advocate the exclusion of candidates who cannot write acceptable English, with the understanding that this rule shall not apply to those for whom English is a foreign tongue.

(c) In addition to these changes in our requirements for normal entrance to College, the so-called "back-door" method of entrance should be closed tighter. A thin but continuous inflow of very inferior students has been maintained by the practice of admitting after a year's residence at other Colleges students who either have avoided our admission examinations or, having tried them, have failed. Such a condition is not satisfactory to either College. This supply we would cut off without at the same time preventing the transfer to Harvard of successful students who desire experience at more than one University, or of candidates who for geographic or other good reasons have been debarred from entrance by the usual method.

We have hitherto assumed that trial by examination is the only adequate procedure. The general opinion in the Committee is otherwise. In our present New Plan the examination is no longer the sole criterion, the school record being accepted as an important part of



the evidence; and the New Plan is distinctly more efficient as a method of selection than the Old. We believe it worth while to make trial cautiously, and on a small scale, of another modification of our entrance requirements, which, while new to the College, is a method of admission to the Law, Medical, and Business Schools. In these Schools, a College rank in the highest third of one's class is considered a qualification for admission. In practice, men chosen on this relative basis hold their own well in competition.

The Committee is well aware that objections will be raised against this plan, and that there are differences of opinion. It may be feared, for instance, that announcement of the proposed opportunity would suggest to the academic public a cheapening of the Harvard standard—indeed, that the standard might actually be lowered by the removal of control by examination. It is held that the schools need the support of College tests, to maintain respectable scholarship. Apprehension is easily aroused that any such scheme may prove to be only the opening wedge in a movement for the substitution of certificate for examination.

In regard to this last objection it should be stated that no member of the Committee has any leaning toward the certificate system. In fact, the Committee is unanimous in the opinion that the adoption of a certificate plan, as the term is now understood, would be a calamity and should not be considered for a moment. The very essence of our proposal is its recognition of the wide difference between the best, wherever found, and the ordinary. The College work of students who come in under the new procedure should be carefully followed, and the whole experiment should be dropped if the results prove unsatisfactory. Moreover the Committee on Admission should have authority to reject candidates from a school whose boys have by their College record given evidence of inadequate preparation.

Concerning the first objection, one may say that it implies a severe indictment of the schools of our country. The Committee is quite unconvinced that the distinguished pupils in any reputable school are beneath the average capacity of the students we now get.

As to the need of our examinations as a goad, it may be pointed out that the stimulus would remain active; for the exemption would apply to only a few boys in each school, the rest being subject to test as before.

5. On the basis of this report, the Committee submits the following recommendations, which constitute a unified plan.

Recommended:

(a) That in the administration of rules for admission Harvard College maintain its traditional policy of freedom from discrimination on grounds of race or religion.

(b) That, as a general policy, transfer of students from other Colleges be confined to such candidates as have lacked opportunity to prepare themselves for admission by the usual methods.

(c) That insistence be stricter on full compliance with the published requirements for admission.

(d) That no candidate be admitted whose examination in English composition is not passable. This rule is not to apply to candidates for whom English is a foreign tongue.

(e) That the number of satisfactory grades under the Old Plan be raised from five to six, announcement being made that a greater increase is likely in the near future.

(f) That the question of discontinuing the Old Plan be raised after the above regulations shall have been in force long enough to permit study of their results.

(g) That Italian be recognized as an admission subject on a par with Spanish.

(h) That Botany and Zoology be added to the list of elective subjects under the New Plan.

(i) That, as an experiment, the following modification be introduced in the published requirements for admission.

Pupils who have satisfactorily completed an approved school course such as is outlined in the description of the New Plan, and whose scholastic rank places them in the highest seventh of the boys of their graduating class, may, if recommended by their School, be admitted to College without examination.

This method of admission is intended to facilitate access to College by capable boys from schools which do not ordinarily prepare their pupils for college examinations.

The College records of students thus admitted will be scrutinized with a view to determining the expediency of extending, restricting, or abolishing the practice.

MICHIGAN.—A recent number of the *Harvard Bulletins in Education* deals with the *Financial Support of the University of Michigan; its Origin and Development*, by R. R. Price, Director of the University Extension, University of Minnesota. The conclusions are as follows:

We have now traced the history of the financial support of the University of Michigan from the time when its main reliance was on the interest of its permanent endowment, with student fees as a comparatively unimportant factor, and with the state assuming no direct financial responsibility; through a period when the student fees and the proceeds of the endowment carried the principal burden, with state aid as a subsidiary element; down to the present time, when the chief burden of university support rests on public taxation, with student fees as a secondary but very important element, and the returns from the permanent endowment an almost negligible factor. The university is now in every sense a *state* university. From these facts some conclusions may be drawn relative to the future support of the university.

1. It is plain that nothing further can be looked for from the permanent endowment. It has already reached its limit and can make no important contribution to the total of university support. When the endowment was made, it was confidently believed that the proceeds from it would be ample to support the university forever. The tremendous increase in the popular demand for higher education and the enormously enhanced cost of all the elements entering into the expense of maintaining a university have thoroughly discredited all calculations on this point.

2. It is also plain that student fees may not be much, if any, further increased if the state universities are any longer to make the claim of furnishing *free* higher education. Tuition is supposed to be free, and that fact is, indeed, established in the organic acts of most of the state universities. The fees at the University of Michigan, as well as at other state universities, although introduced under the specious label of 'annual tax' are in fact no longer nominal, and alumni and other friends of the universities are already showing some restlessness under these exactions.

3. There remains, then, only some form of state taxation. Without any doubt, experience has shown that the best form of state tax is a mill tax, which may be counted on from year to year and over a long

period of years, and which may be expected to increase as the state assessed valuation advances. The advantage of this system over a system of annual or biennial appropriations is obvious. Especially is this true when the mill tax may be supplemented from time to time, as the need arises, by special appropriations for buildings or other emergency purposes. But even a mill tax, as we have seen in the case of Michigan, needs to have its rate of percentage increased from time to time, when the university needs advance faster than do the assessed valuations. President Kinley of the University of Illinois believes that a per capita expenditure in different lines and grades of teaching should be calculated every two years in each university. On this basis there can be obtained an approximate estimate of the total amount needed for a given number of students in a particular institution. This per capita expense should be a weighted average of the per capita expenses in all departments of work. For the University of Illinois in 1920 this would amount to about \$500 for all purposes—teaching, research, administration, physical plant operation, etc.

President Kinley also set forth the following as essentials of a special source of revenue for a state university.

1. The source must be adequate.
2. It should increase steadily from year to year at a rate approximately the same as the growth of the university.
3. It should have a broad base, instead of being tied to a single interest or industry.
4. Fluctuation from year to year must not be great.
5. It should be related to the progress of the state in population and wealth and to the returns from education as far as ascertainable, so that the assignment of the particular source of revenue will commend itself.
6. It must be such as to command the approval of the legislature and the people.

He also advocates a tax based on the total wealth of the state rather than upon the assessed valuation. A sufficient mill tax on the total valuation would be adequate indefinitely, as it would grow with the institution. Perhaps there should be a fixed mill tax on the total state revenue and in addition a fixed annual increment over a base year.<sup>1</sup>

<sup>1</sup> *Proceedings of the National Association of State Universities*, vol. XVIII, 1920, pp. 132-134.  
(253)



It seems highly probable that on some such lines as are indicated above that problem of adequate, permanent, and flexible support of state universities will finally be solved.

MOUNT HOLYOKE.—“Our chapter is in a healthy condition with a large percentage of membership.

“A recent symposium on Recent Experiments in Education (Initiatory Courses for Freshman, Reed College Plan, etc.) was most successful. We plan more such meetings for the immediate future.”

OHIO STATE. THE TRUSTEE'S POINT OF VIEW.<sup>1</sup>—I am greatly indebted to my friends of the local chapter at Columbus, and to the American Association of University Professors, for putting my name on the mailing list of the BULLETIN. I have read the two numbers received with great interest.

The reports and discussions are extremely illuminating and I find myself wishing that the members of the “third estate” of university organization, namely, the *trustees*, might be induced or compelled to read the BULLETIN.

And it might not be a bad idea if, in connection with the discussion of some of your problems, the Trustees' point of view should find expression.

Having had the good fortune to be obliged to consider college problems from nearly all azimuths, I may, perhaps, lay claim to a more complete recognition of relations than the average trustee (which is my function at the present moment), and as a result I am convinced that one of the principal weaknesses of the prevailing system of control is the lack of a more intimate relation between trustees and faculties, especially when members of the latter are numbered by the hundreds, as in all the leading institutions today.

Theoretically the president or chancellor is the connecting link and he will often call in deans or department heads to shorten the distance between trustees and faculty, but nevertheless it not infrequently happens that a trustee is obliged to vote upon a matter of grave significance to a professor or a group of professors of whom he has personally no knowledge whatever.

It seems difficult, however, to suggest any solution of the problem.

<sup>1</sup> Extracts from a letter to the Secretary.

College and university presidents are, on the whole, a rather decent sort of folk, even in the opinion of the average professor, and have every incentive to paint a true portrait of every member of the instructional force whose status is under consideration by the trustees, and the particular one in whom I am personally most interested possesses a really marvelous capacity for marshalling all the facts, arguments, reasons and opinions of both sides of a controversy.

But still I should be glad if the closer touch could in some way be established.

However, I suppose that one who has already a fair start in the *ninth* decade of his career of this little "globelet" should refrain from meddling in matters that are not likely to give him much personal concern, but the temptation to unload on a younger generation what an older believes to be the teachings of experience, is very strong.

T. C. MENDENHALL

THE CURRICULUM AT REED COLLEGE.—"I think you will agree with me that three of the most important problems facing us today are the reconciliation of democracy (and I may add Christianity) with our industrial order; of democracy and nationalism, on the basis of self-respecting equality and moral autonomy, with some form of world organization and world order; and last of all (particularly in view of the alarmist and pernicious influence of certain well-known, recent best sellers), the problem raised by the last great meeting of East and West with its portentous problem of the contact of races and cultures of various levels in an increasingly industrialized and democratic world.

"In all of these fields the drift towards the newer humanism is unmistakable. Economics is no longer merely a process of production, but more and more a matter of human government involving the due recognition of the human equation and of the democratic truth that equality of opportunity is fundamental to true freedom. Fortunately or unfortunately, many of our great economic problems, national and international, have to be settled politically. Similarly in the matter of international relations, one of our difficulties is the survival of the eighteenth century conception of the state and of the survival and intensification of century-old hatreds and prejudices. However,

the state is being humanized, moralized, and the imperialism of exploitation and domination is gradually being transformed into temporary trusteeship against the time when the backward peoples of the earth shall have reached their political majority by the progressive extension of liberty and self-government. Most important of all, the problem of racial and cultural contacts and rivalries is ultimately and in the last analysis not so much a matter of biological difference or of the clash of economic interests as of a proper understanding of the habits of mind, mental attitudes and outlook that have been centuries in the making. Historic-mindedness, clear thinking and sympathy, are needed, along with a proper realization of the scientific facts underlying racial and cultural problems.

"Certain present-day movements and tendencies—not restricted by any means to Oregon—should impress upon us the duty of making plain to our citizens that Americanism is not to be achieved by force and compulsion in the realm of ideas and ideals, and that we must not confuse external uniformity and conformity with what a Frenchman has so well called 'a sacred union of hearts.' The great task and opportunity of the Liberal College, it seems to me, is to make and keep our young men and women fit for freedom and for free institutions. . .

"One of our first tasks is to eliminate the bookkeeping attitude toward education. We are trying to think no longer in terms of credits and units and three or four or five hour courses and are doing away with the water-tight department system in favor of divisional groups in Literature and Language, History and Social Science, Mathematics and Natural Science, and Philosophy and Psychology. The student is encouraged to look upon his work as forming one unified course of study, and is made to feel that with his freshman year he enters upon a four-year program all the various parts of which are closely bound up with one another.

"During the first two years he pursues an integrated course of study with differentiated but correlated reading and conferences, and with a further possible deviation accordingly as his primary interests lie in the field of Mathematics and Science or in that of Letters and Social Science. Instead of a freshman orientation and survey course, informational in nature, or a formal course of a few hours a week devoted to teaching the student how to study and how to think, it is our

plan to devote the work of the first two years to an examination of the fundamental basis and historical backgrounds of contemporary civilization, as they can be studied in the great representative fields of knowledge. The different ways of approach, methods of work, viewpoint or interpretation in identical or allied fields presented on a year's basis; the careful selection of a faculty composed of instructors who, while engaged in private research, are primarily teachers, and who have had very different training and who hold differing opinions and viewpoints, and collateral and interrelated reading in the modern languages—all these tend to do away with the police attitude between students and faculty, and to provoke thought and discussion after the fashion of Socrates' 'Think-shop.' Lectures are few; the conference method, by small groups and individuals, predominates. Education is viewed as a cooperative process by discussion and consent.

"On that basis, an appeal is made not to make sure of minimum requirements but of maximum voluntary effort on the part of both students and faculty. The use of the textbook is reduced to a minimum, and we have had gratifying success with supervised suggested readings during the summer vacation. Enthusiastic cooperation of instructors is, of course, necessary, and frequent meetings are held of what are, in the main, separate 'crews' of freshman and sophomore instructors. Under the new scheme, except in a limited number of cases, professors and assistant professors are given an opportunity to meet with small groups and with the individual students during the entire year, making unnecessary the usual artificial advisory systems by making it possible for the divisional faculty groups to be of great service in helping the individual student to a wise choice of a major interest when he comes to the end of the sophomore year. Incidentally, it helps to build up, also, a sound, self-respecting honor spirit and intellectual *cameraderie*.

"We have worked out for the first two years a unified course of study which is elastic enough to permit the student to express and cultivate legitimate interests of his own, in the place of the old haphazard elective course. The elective principle is preserved, but is made to subserve the synthetic idea of an interrelated and integrated curriculum. The work of the freshman year is given up to a consideration of the evolution of man in nature and society, man's biological and social heritage, and his achievements in literature and



the arts; and in lieu of the old formal logic course there is substituted an introduction to mathematical analysis and to the basic conceptions and theories of exact science. In connection with the work in the history of civilization, students are given the choice of reading in government and law, in economic and social institutions, or in cultural history. In small supplementary conference sections this reading is correlated with an intensive study of some one phase of institutional development (political, economic, social), or of culture (literature, art, music). The year's work in biology, incidentally, provides an opportunity for a thorough preliminary study of the principles and processes of heredity and environment in their human applications, which serves to throw light on one of the very first problems met with in the history of civilization, namely, the relation between race and language and culture. (I am simply trying to emphasize the point that these are not the ordinary survey courses.)

"This unified course of study during the freshman year is intended to provide the necessary perspective for a sound understanding of the modern world, to demonstrate the fundamental unity of mankind and of nature, and to make possible an understanding appreciation of the diversity of the contributions made by individuals and peoples to that totality which we call contemporary civilization. To an intensive study of this contemporary civilization, again in certain representative fields, the work of the sophomore year is devoted. As in the freshman year, the attempt is again made to correlate and integrate into a unified course of study for the year the literary, historical and social, and scientific approaches to the common field of study. For those whose primary interests lie in mathematics and the natural sciences, the usual close correlations are preserved and emphasized."

PRESIDENT R. F. SCHOLZ, in the *Bulletin of the Association of American Colleges*.

## MEMBERSHIP

### MEMBERS ELECTED

The Committee on Admissions announces the election of one hundred and thirty-nine members, as follows:

#### 1. *Nominations Published in March*

**Boston University**, Roy Davis, T. L. Easterling, R. H. Loomis, C. M. Strong; **Carleton College**, E. A. Fath, D. B. Young; **Denison University**, W. M. Gewehr; **Georgia School of Technology**, T. W. Fitzgerald; **University of Georgia**, J. D. Wade, R. P. Walker; **Grinnell College**, D. F. Grass, R. H. Perring; **Johns Hopkins University**, W. O. Weyforth; **Hood College**, H. C. York; **Hunter College**, E. S. Burgess; **Iowa State College**, Joanna M. Hansen; **Lake Erie College**, Beulah L. Hanley; **University of Manitoba**, N. R. Wilson; **McKendree College**, C. W. Knapp; **Mills College**, Ella Bourne, Martha G. Castor, Minnie A. Graham, Elizabeth Rothermel, Lurene Seymour; **University of Nebraska**, Esther Anderson, Letta M. Clark, Adeline Reynoldson, Ona Wagner; **University of North Dakota**, Thomas Matthews, C. C. Schmidt, J. G. Sinclair, R. T. Young; **Oregon Agricultural College**, Morris Wenk; **Pennsylvania State College**, O. F. Bouche; **University of Redlands**, Flora C. Cook, W. T. Darby, C. H. Marsh; **Union College**, Fernand Jagu, A. D. Snyder; **University of Tennessee**, J. W. Sprowls; **Trinity College**, C. B. Hurd; **Washington and Lee University**, R. W. Dickey, Willard Farnham, W. T. Lyle, B. A. Wooten; **West Virginia University**, J. R. Miller.

#### 2. *Nominations Published in April*

**University of Akron**, Charles Bulger, F. F. Householder, T. L. McJoynt, O. E. Olin, A. B. Plowman; **University of Buffalo**, R. F. Morgan; **Butler College**, Evelyn Butler, W. L. Richardson, Anna F. Weaver, Corinne Welling; **University of California**, F. L. Griffin; **Carnegie Institute of Technology**, H. L. Lang; **University of Chattanooga**, L. F. Snow; **University of Chicago**, S. B. Barrett, E. S. Bastin, J. H. Bretz, Harvey Carr, C. C. Colby, H. C. E. David, A. J. Dempster, L. R. Dragstedt, J. W. E. Glattfeld, Evelyn G. Halliday, A. E. Haydon, F. A. Kingsbury, E. R. Long, G. L. Marsh, P. G. Mode, H. C. Morrison, B. N. Nicolet, J. F. Norton, R. S. Platt, E. W.

Puttkammer, E. S. Robinson, Walter Sargent, A. P. Scott, Alice Temple, Jacob Viner; **University of Cincinnati**, G. A. Hedger; **Cornell College**, C. R. Keyes; **Cornell University**, Lewis Knudson, L. M. Massey; **University of Delaware**, W. L. Bevan, E. B. Crooks, A. S. Eastman, F. M. K. Foster, G. A. Koerber, G. H. Ryden, W. A. Wilkinson; **Georgia School of Technology**, B. B. Wroth; **Hood College**, Kathryn L. Abbey, Lillian O. Brown, Virginia Carty, Helen Price; **Hunter College**, Lewis D. Hill; **Iowa State College**, Frank E. Brown, S. L. Galpin, B. M. Harrison, F. H. McClain, H. M. McLaughlin, Eda L. Murphy, E. H. Willmarth; **Kansas State Agricultural College**, W. R. Brackett; **Knox College**, G. W. Hunter; **Massachusetts Institute of Technology**, I. H. Cowdrey, Ralph Morris; **Muhlenburg College**, I. M. Wright; **University of Nebraska**, E. H. Barbour; **Occidental College**, W. D. Ward; **Ohio University**, A. W. Boetticher; **Princeton University**, T. J. Browne, C. W. Hendel, S. J. Howe, F. C. Tarr; **Stanford University**, J. P. Baumberger, R. H. Lutz, E. G. Martin, A. G. Vestal; **University of Texas**, A. A. Bennett, Mary E. Decherd, W. A. Felsing, M. L. Hanley, Goldie P. Horton, J. N. Michie, J. E. Pearce; **Trinity College (N. C.)**, W. K. Boyd, A. M. Webb; **Union College**, R. D. Kleeman; **U. S. Naval Academy**, E. A. Aldrich, Sidney Gunn, R. S. Merrick, F. I. Myers; **Westminster College**, E. J. Eberling; **West Virginia University**, P. I. Reed.

### NOMINATIONS FOR MEMBERSHIP

The following two hundred and eleven nominations are printed as provided under the Article IV of the Constitution. Objection to any nominee may be addressed to the Secretary, H. W. Tyler, Cambridge, Mass., or to the Chairman of the Committee on Admissions<sup>1</sup> and will be considered by the Committee if received before July 15, 1923.

The Committee on Admissions consists of Florence Bascom<sup>2</sup> (Bryn Mawr), Chairman, J. Q. Dealey (Brown), A. R. Hohlfeld (Wisconsin), A. L. Keith (South Dakota), G. H. Marx (Stanford), and F. C. Woodward (Chicago).

<sup>1</sup> Nominations should in all cases be presented through the Secretary, H. W. Tyler, 222 Charles River Road, Cambridge, Mass.

<sup>2</sup> Present address: U. S. Geological Survey, Washington, D. C.

Charles Harlan Abbott (Zoology), Redlands  
Marguerite F. Abbot (Household Economics), Carnegie  
Colin C. Alexander (English), Baker  
Thomas Rush Alexander (Chemical Engineering), Carnegie  
Alfred E. Alton (Biblical Literature), Colgate  
Walter R. Ames (Education and Psychology), Montana  
Alcide T. M. deAndria (Romance Languages), Boston  
Almon A. Arnold (Modern Languages), Oklahoma Agricultural  
Ernest J. Ashbaugh (School Administration), Ohio  
Francis Marsh Baldwin (Physiology), Iowa State  
Paul F. Baum (English), Trinity (N. C.)  
A. L. Beam (Dairy Husbandry), Pennsylvania State  
A. S. Begg (Anatomy), Boston  
Charles E. Bellatty (Advertising), Boston  
F. L. Bentley (Animal Husbandry), Pennsylvania State  
Herbert M. Boylston (Metallurgy), Case  
Herbert Earle Buchanan (Mathematics), Tulane  
Agnes M. H. Byrnes (Social Work), Carnegie  
A. U. N. Camera (Romance Languages), City of New York  
E. F. A. Carey (Mathematics), Montana  
Frances Annette Cartlidge (Music), Redlands  
Sidney L. Chandler (Sociology), Cornell College  
Gertrude Chase (English), Wells  
A. C. Cloethingh (English), Pennsylvania State  
W. B. Combs (Dairy), Pennsylvania State  
Samuel L. Conner (Civil Engineering), Tufts  
William J. H. Cotton (Economics), Trinity (N. C.)  
Bert Cunningham (Biology), Trinity (N. C.)  
Willey Denis (Physical Chemistry), Tulane  
William Wells Denton (Mathematics), Michigan  
Raymond D. Douglass (Mathematics), Mass. Inst. Tech.  
Samuel Dupertius (French), Boston  
R. Adams Dutcher (Agriculture), Pennsylvania State  
Mayme Dvorak (Bacteriology), North Dakota Agricultural  
William Seddinger Dye (English), Pennsylvania State  
J. Edward Erickson (Sociology), Franklin  
Karl Henry Eschman (Music), Denison  
Thomas G. Estep (Mechanical), Carnegie  
Jane Fales (Cost Economics), Carnegie



Fay Farnum (Mathematics), Iowa State  
Mary H. Filler (Voice), Hood  
Genevieve Fisher (Home Economics), Carnegie  
Pastoriza Flores (Spanish), Goucher  
Francis M. Garver (Education), North Dakota  
E. F. George (Physics), West Virginia  
James E. Gillespie (History), Pennsylvania State  
Louis J. Gillespie (Chemistry), Mass. Inst. Tech.  
Harriet F. Glendon (Household Economics), Carnegie  
Walter J. Goggin (Accounting), Boston  
Howard C. Griffin (Chemistry), Carnegie  
Paul Gross (Chemistry), Trinity (N. C.)  
Robert Theodore Hance (Zoology), North Dakota Agricultural  
Ralph V. Harlow (History), Boston  
Robert T. Haslam (Chemical Engineering), Mass. Inst. Tech.  
B. M. Herman (History), Pennsylvania State  
William G. Hoffman (English), Boston  
Arthur P. Honess (Geology and Mineralogy), Pennsylvania State  
Sanford Burton Hooker (Medicine), Boston  
N. W. Ingalls (Anatomy), Western Reserve  
Arthur D. Jacobsen (Economics), Montana  
Ruth M. Jakway (Home Economics), Cornell  
Robert M. Jameson (Economics), Boston  
Paul Kaufman (English), American  
John Smith Kendall (Spanish), Tulane  
Harry McCormick Kelly (Biology), Cornell College  
John B. Kelso (Greek), Wooster  
Lillian S. Kennedy (Household Economics), Carnegie  
Milo Kimball (Economics), Boston  
Walter H. Klar (Education and Psychology), Carnegie  
John F. Klein (Modern Languages), Franklin  
John I. Knudson (History), Franklin  
Reginald C. Lamb (Mathematics), U. S. Naval  
LaDema M. Langdon (Biology), Goucher  
William F. Langworth (Biology), Colgate  
William M. Lawrence (Homiletics), Colgate  
George B. Lawson (Education), Bucknell  
Charles R. Layton (Public Speaking), Muskingum  
Robert B. Leighou (Chemistry), Carnegie

Harry F. Lewis (Chemistry), Cornell College  
F. B. Lincoln (Horticulture), Pennsylvania State  
Walter J. Livingston (Physical Education), Denison  
Manuel L. Lopez (Romance Languages), Trinity (N. C.)  
Brenton Reid Lutz (Biology), Boston  
S. A. Mahood (Chemistry), Tulane  
H. D. Marsh (Philosophy), City of New York  
J. E. McCord (Rural Life), Pennsylvania State  
Kathryn McHale (Education), Goucher  
F. D. McIntosh (Metallurgy), Carnegie  
John Duncan Macmillan (English), Carnegie  
Walter L. Mendenhall (Pharmacology), Boston  
P. T. Miller (Chemistry), Wyoming  
Fred B. Millett (English), Carnegie  
A. E. Minard (English), North Dakota Agricultural  
Bruce V. Moore (Education and Psychology), Pennsylvania State  
Samuel Morris (Chemistry), West Virginia  
H. W. Moseley (Chemistry), Tulane  
Casper I. Nelson (Bacteriology), North Dakota Agricultural  
Lee Drew O'Neil (Foreign Trade), Boston  
Orland O. Norris (Latin), Michigan Normal  
H. G. Parkinson (Rural Life), Pennsylvania State  
William Tudor Pearce (Chemistry), North Dakota Agricultural  
Marshall L. Perrin (German), Boston  
Iva Lowther Peters (Economics), Goucher  
H. B. Pierce (Chemistry), Pennsylvania State  
Eugene L. Porter (Physiology), Western Reserve  
Frederick Haven Pratt (Physiology), Boston  
S. L. Pressey (Psychology), Ohio  
Isaiah March Rapp (Physics), Montana  
Martin Remp (Education), Wooster  
Ernest Shaw Reynolds (Botany), North Dakota Agricultural  
Lillie Richardson (History), Carnegie  
Clair W. Robinson (Geology), Pennsylvania State  
J. M. Rogoff (Medicine), Western Reserve  
John Chilton Scammell (English), Boston  
Henry A. Schauffler (Civil Engineering), Union  
Max Schoen (Education and Psychology), Carnegie  
Esther E. Shaw (English), Hood

Frank L. Shepardson (Greek), Colgate  
J. Melbourne Shortliffe (Economics), Colgate  
Everett J. Slate (English), Boston  
Arthur Whipple Smith (Mathematics), Colgate  
Edwin Horace Smith (Industrial Education), Carnegie  
Warren D. Smith (Geology), Oregon  
Charles Beecher Stanton (Civil Engineering), Carnegie  
Cecile Van Steenberg (Cost Economics), Carnegie  
Arthur L. Stone (Journalism), Montana  
Milton C. Stuart (Mechanical Engineering), U. S. Naval  
F. C. Swansen (Political Science), Carnegie  
Wilbur D. Swope (Dairy Husbandry), Pennsylvania State  
C. F. Taeusch (Philosophy), Tulane  
James S. Taylor (Mathematics), Mass. Inst. Tech.  
Benjamin Carroll Tharp (Botany), Texas  
Ross P. Thomas (Physics), Wittenberg  
Thomas M. Thompson (Psychology and Education), Colgate  
George Ellsworth Thompson (Physics), Iowa State  
Judson Allen Tolman (Ancient Languages), Oklahoma Agricultural  
W. H. Tomhave (Animal Husbandry), Pennsylvania State  
Willibald Trinks (Mechanical Engineering), Carnegie  
Harry R. Tosdal (Business Administration), Harvard  
Frances J. Tschan (History), Carnegie  
Clyde Tull (English), Cornell College  
Abbott Payson Usher (Economics), Harvard  
J. Milton Vance (New Testament), Wooster  
David D. Vaughan (Social Service), Boston  
Louis Wann (English), Southern California  
Robert L. Webster (Entomology), North Dakota Agricultural  
Wanda Weniger (Botany), North Dakota Agricultural  
Gertrude M. White (Zoology), Carnegie  
Newman I. White (English), Trinity (N. C.)  
Roy A. Wilson (Geology), Montana  
Edith M. Winchester (Secretarial), Carnegie  
A. E. Wood (Chemistry), Colgate  
Alice S. Woodman (Histology and Embryology), Boston  
Joseph U. Yarbrough (Education and Psychology), Carnegie  
R. M. Young (Building Construction), Carnegie

## SUPPLEMENTARY LIST

R. L. Adams (Farm Management), California  
A. A. Allen (Entomology), Cornell  
S. H. Beckett, (Irrigation), California  
J. P. Bretz (History), Cornell  
Donald Bruce (Forestry), California  
Julian E. Butterworth (Rural Education), Cornell  
Alan Ditchfield Campbell (Mathematics), Cornell  
Harry Todd Costello (Philosophy), Trinity (Conn.)  
Clyde Firman Craig (Mathematics), Cornell  
C. R. Crosby (Entomology), Cornell  
W. V. Cruess (Fruit Products), California  
Karl M. Dallenbach (Psychology), Cornell  
Theodore H. Eaton (Rural Education), Cornell  
Donald English (Economics), Cornell  
E. O. Essig (Entomology), California  
Frederic E. Fiske (English), Cornell  
Harry M. Fitzpatrick (Plant Pathology), Cornell  
William T. M. Forbes (Entomology), Cornell  
Dean L. Gamble (Zoology), Cornell  
Roswell C. Gibbs (Physics), Cornell  
David C. Gillespie (Mathematics), Cornell  
William A. Hammond (Philosophy), Cornell  
G. H. Hart (Veterinary Science), California  
F. M. Hayes (Veterinary Science), California  
J. William Hebel (English), Cornell  
W. B. Herms (Entomology), California  
Glenn W. Herrick (Entomology), Cornell  
Ralph M. Holmes (Physics), Cornell  
W. T. Horne (Plant Pathology), California  
Harley E. Howe (Physics), Cornell  
Thomas Forsyth Hunt (Agriculture), California  
Horace L. Jones (Greek), Cornell  
E. H. Kennard (Physics), Cornell  
Robert Matheson (Entomology), Cornell  
David S. Morse (Mathematics), Cornell  
Walter Mulford (Forestry), California  
Ernest T. Paine (Philosophy), Cornell  
Loren C. Petry (Botany), Cornell



Paul R. Pope (German), Cornell  
 Frederick C. Prescott (English), Cornell  
 F. W. Owen (Mathematics), Cornell  
 C. L. Roadhouse (Dairy), California  
 G. M. Robison (Mathematics), Cornell  
 J. H. Rogers (Economics), Cornell  
 Lester W. Sharp (Botany), Cornell  
 S. H. Slichter (Economics), Cornell  
 Frederick M. Smith (English), Cornell  
 Rolland M. Stewart (Rural Education), Cornell  
 Harry Shultz Vandiver (Mathematics), Cornell  
 Seth Wakeman (Education), Cornell  
 H. J. Webber (Agriculture), California  
 H. P. Weld (Psychology), Cornell  
 John W. Wilce (Physical Education), Ohio  
 W. L. G. Williams (Mathematics), Cornell  
 George Alan Works (Rural Education), Cornell  
 Benjamin P. Young (Zoology), Cornell